

Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Up\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**L-ch (QPSK\_RB=1\_High)/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.17 mW/g

**L-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 28.0 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 1.70 W/kg

**SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.592 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.26 mW/g

**L-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

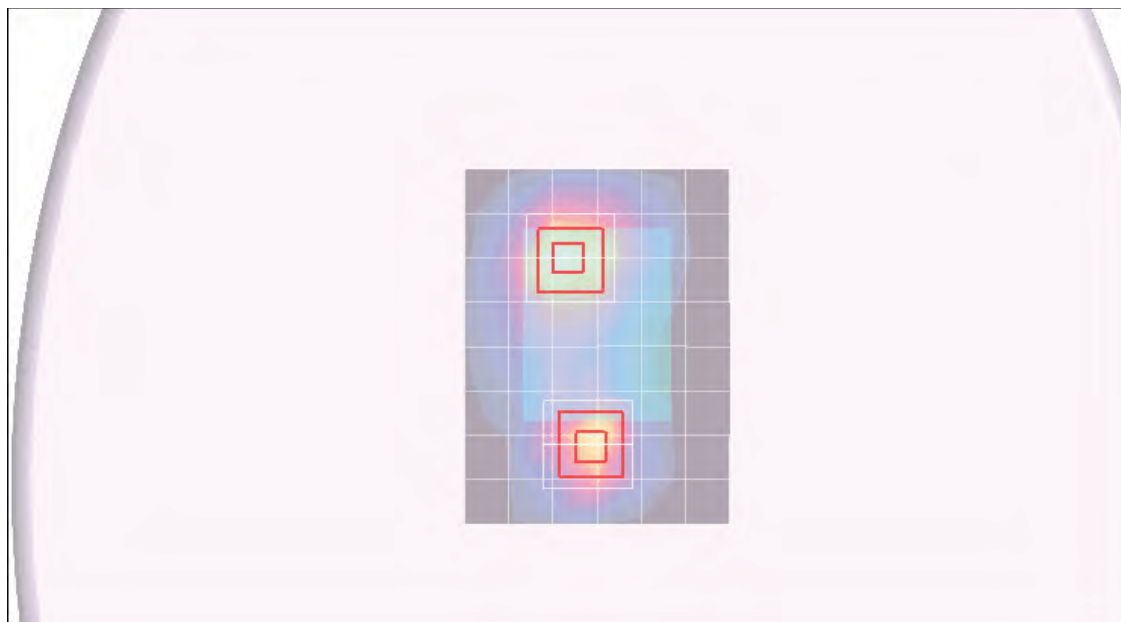
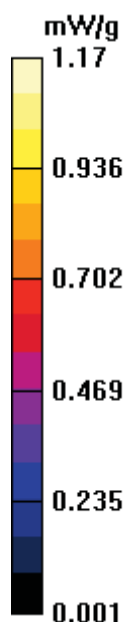
Reference Value = 28.0 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 1.54 W/kg

**SAR(1 g) = 0.870 mW/g; SAR(10 g) = 0.453 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.10 mW/g



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### LTE Band 4\_Horizontal Up\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5 \text{ MHz}$ ;  $\sigma = 1.51 \text{ mho/m}$ ;  $\epsilon_r = 52.7$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

- DASY4 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
  - Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
  - Sensor-Surface: 3mm (Mechanical Surface Detection)
  - Electronics: DAE3 Sn427; Calibrated: 7/21/2010
  - Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
  - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

#### Mid-ch (QPSK\_RB=1\_High)/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.01 mW/g

#### Mid-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.4 V/m; Power Drift = 0.141 dB

Peak SAR (extrapolated) = 1.62 W/kg

**SAR(1 g) = 0.862 mW/g; SAR(10 g) = 0.444 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.11 mW/g

#### Mid-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=3mm

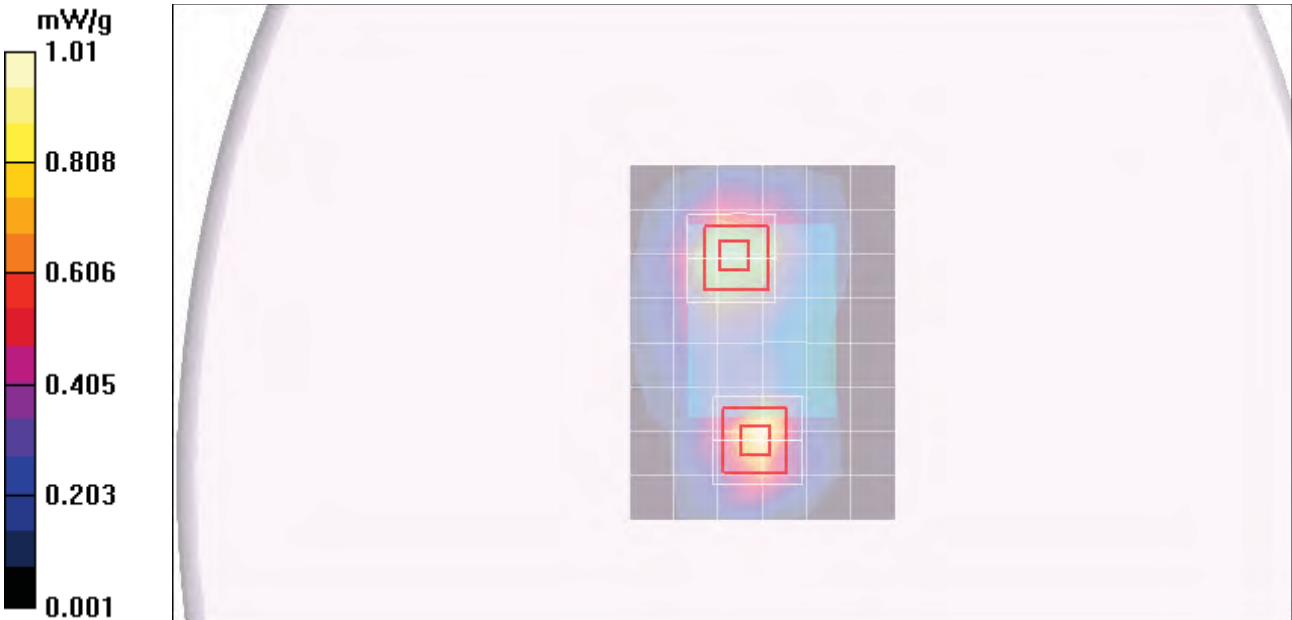
Reference Value = 25.4 V/m; Power Drift = 0.141 dB

Peak SAR (extrapolated) = 1.46 W/kg

**SAR(1 g) = 0.845 mW/g; SAR(10 g) = 0.480 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.03 mW/g



Test Laboratory: Compliance Certification Services

### LTE Band 4\_Horizontal Up\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1749.9 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

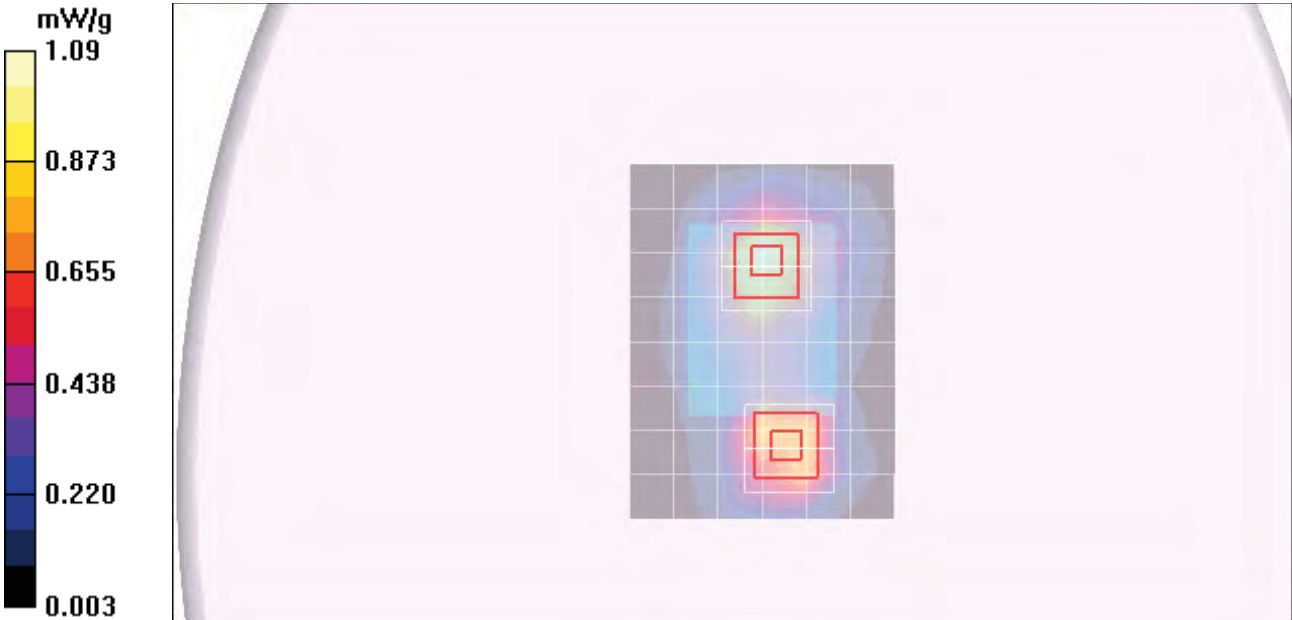
DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**H-ch (QPSK\_RB=1\_High)/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.09 mW/g

**H-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm  
Reference Value = 26.7 V/m; Power Drift = -0.151 dB  
Peak SAR (extrapolated) = 1.76 W/kg  
**SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.526 mW/g**  
Maximum value of SAR (measured) = 1.25 mW/g

**H-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm  
Reference Value = 26.7 V/m; Power Drift = -0.151 dB  
Peak SAR (extrapolated) = 1.49 W/kg  
**SAR(1 g) = 0.897 mW/g; SAR(10 g) = 0.513 mW/g**



Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Up\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**L-ch (QPSK\_RB=1\_Low)/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.32 mW/g

**L-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 29.7 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 1.76 W/kg

**SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.627 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.33 mW/g

**L-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

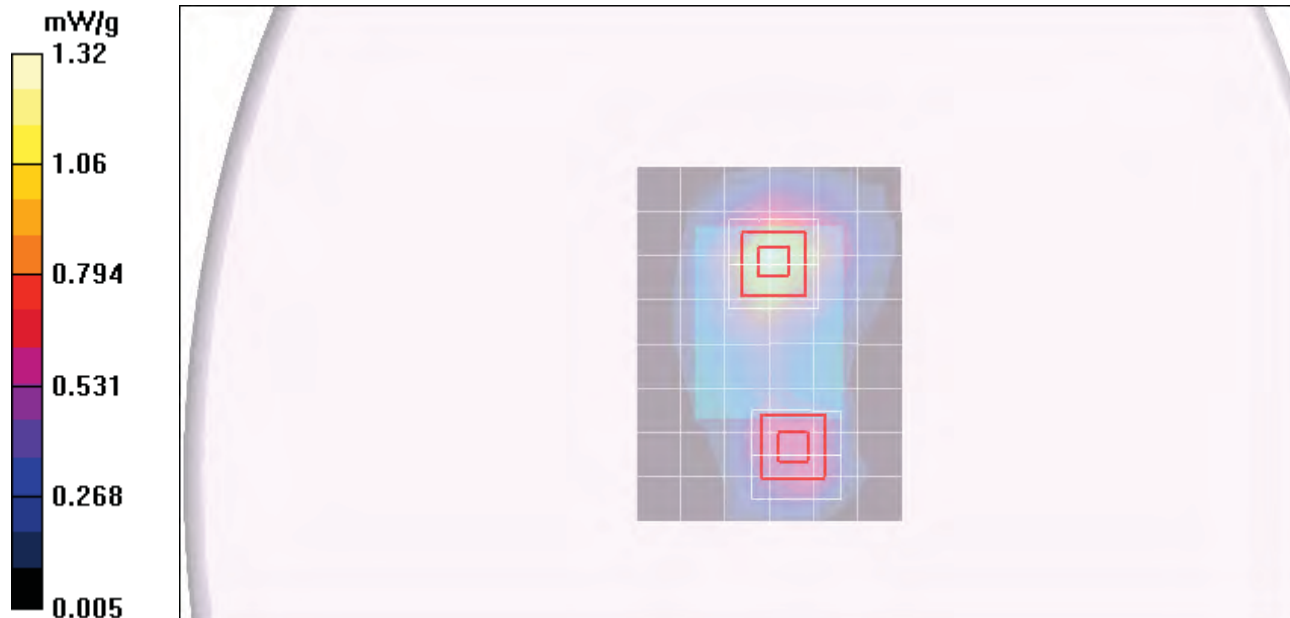
Reference Value = 29.7 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 1.58 W/kg

**SAR(1 g) = 0.811 mW/g; SAR(10 g) = 0.426 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.02 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_HORIZONTAL-UP\_10MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (QPSK\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.02 mW/g

**Mid-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 26.0 V/m; Power Drift = -0.121 dB

Peak SAR (extrapolated) = 1.34 W/kg

**SAR(1 g) = 0.814 mW/g; SAR(10 g) = 0.471 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.981 mW/g

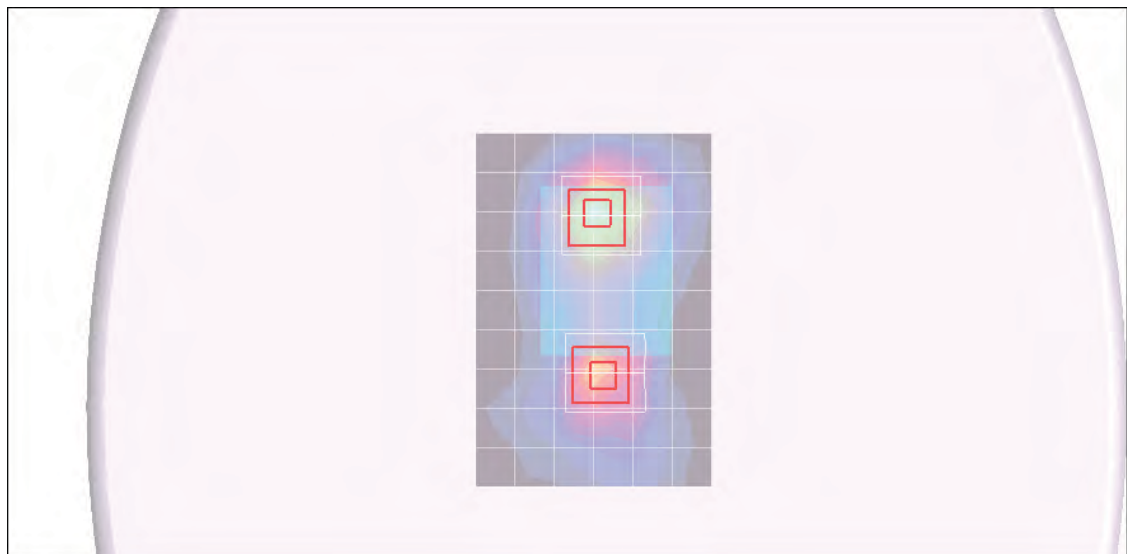
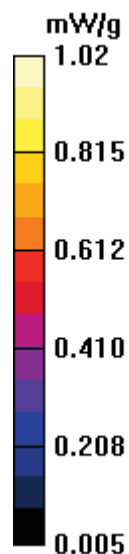
**Mid-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 26.0 V/m; Power Drift = -0.121 dB

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.335 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.792 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 53.3$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (QPSK\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.912 mW/g

**High-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 24.5 V/m; Power Drift = -0.124 dB

Peak SAR (extrapolated) = 1.22 W/kg

**SAR(1 g) = 0.740 mW/g; SAR(10 g) = 0.432 mW/g**

Maximum value of SAR (measured) = 0.883 mW/g

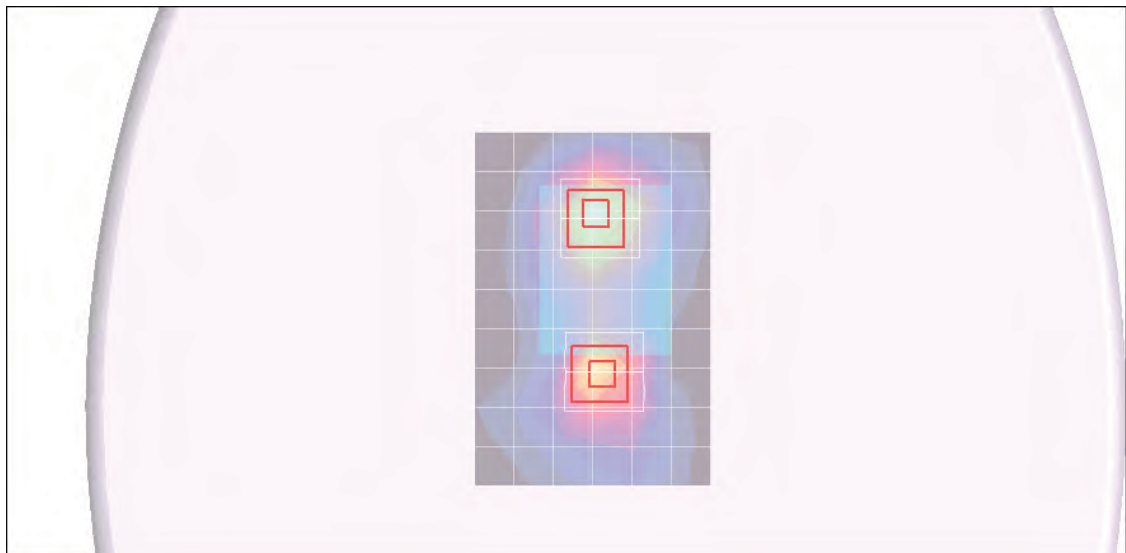
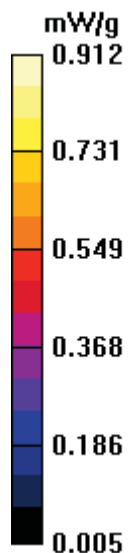
**High-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 24.5 V/m; Power Drift = -0.124 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.673 mW/g; SAR(10 g) = 0.358 mW/g**

Maximum value of SAR (measured) = 0.849 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Low-ch (16QAM\_RB=1\_High)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.951 mW/g

**Low-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.3 V/m; Power Drift = -0.199 dB

Peak SAR (extrapolated) = 1.27 W/kg

**SAR(1 g) = 0.763 mW/g; SAR(10 g) = 0.444 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.908 mW/g

**Low-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

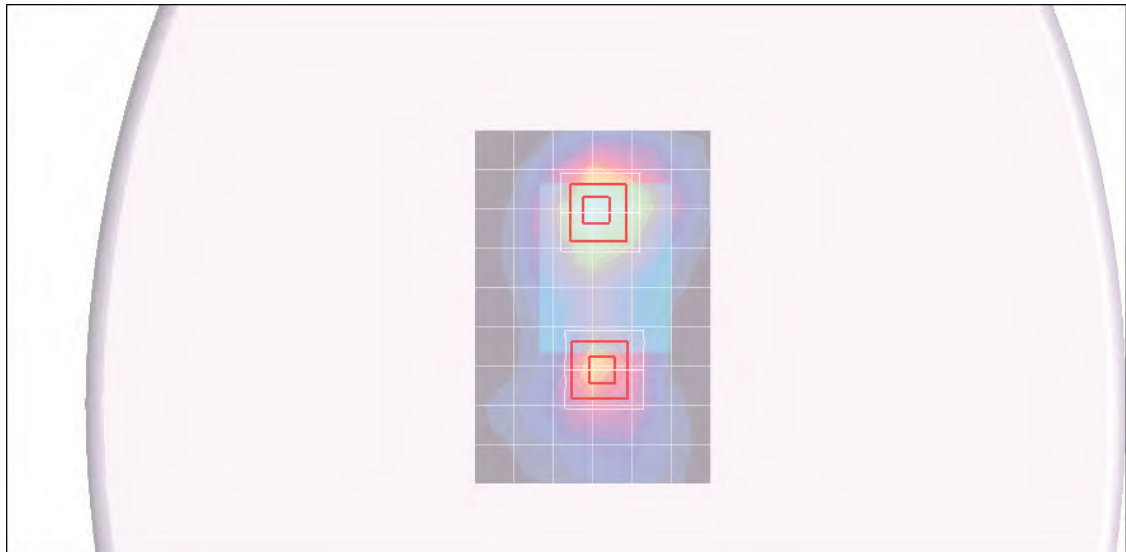
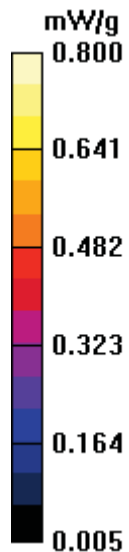
Reference Value = 25.3 V/m; Power Drift = -0.199 dB

Peak SAR (extrapolated) = 0.911 W/kg

**SAR(1 g) = 0.521 mW/g; SAR(10 g) = 0.281 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.643 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (16QAM\_RB=1\_High)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.985 mW/g

**Mid-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.8 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 1.33 W/kg

**SAR(1 g) = 0.800 mW/g; SAR(10 g) = 0.465 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.954 mW/g

**Mid-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

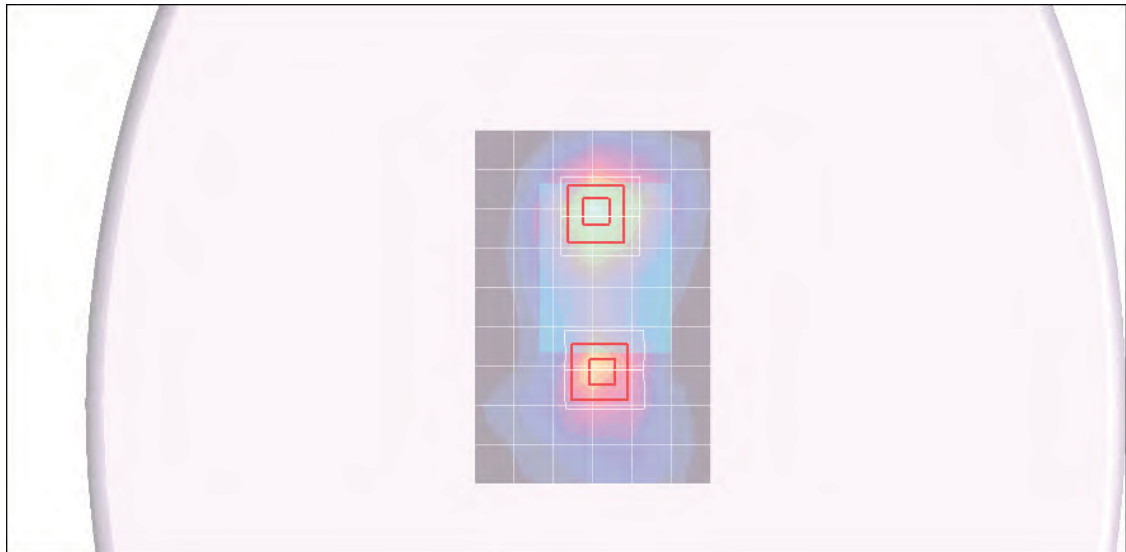
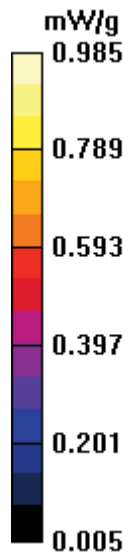
Reference Value = 25.8 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.649 mW/g; SAR(10 g) = 0.348 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.804 mW/g





Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (16QAM\_RB=1\_High)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.02 mW/g

**High-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.7 V/m; Power Drift = -0.137 dB

Peak SAR (extrapolated) = 1.33 W/kg

**SAR(1 g) = 0.813 mW/g; SAR(10 g) = 0.474 mW/g**

Maximum value of SAR (measured) = 0.976 mW/g

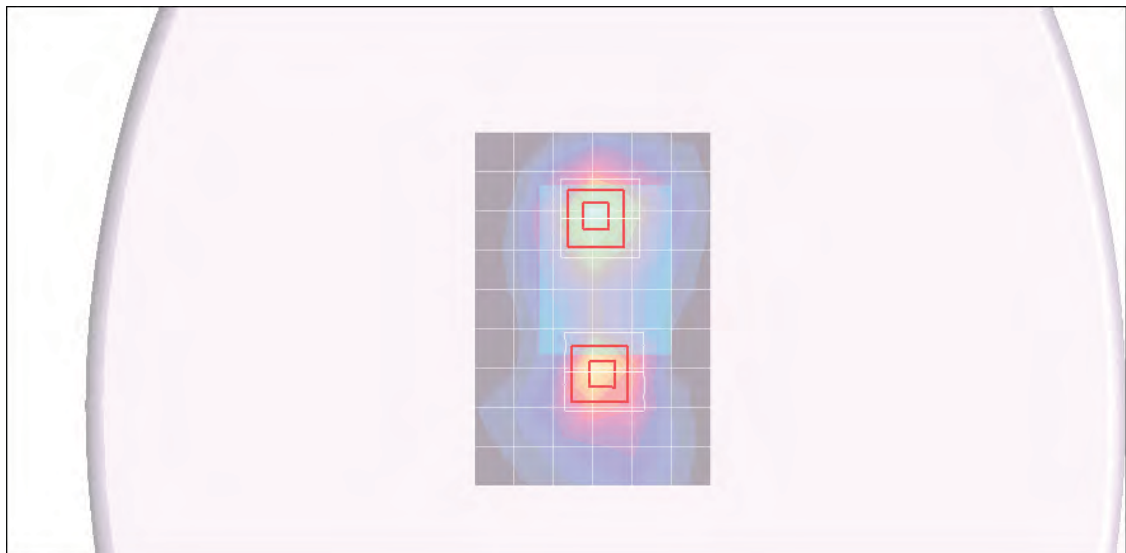
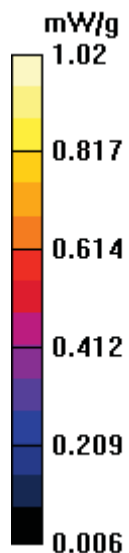
**High-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.7 V/m; Power Drift = -0.137 dB

Peak SAR (extrapolated) = 1.37 W/kg

**SAR(1 g) = 0.771 mW/g; SAR(10 g) = 0.411 mW/g**

Maximum value of SAR (measured) = 0.961 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Low-ch (16QAM\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.934 mW/g

**Low-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.4 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 1.42 W/kg

**SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.463 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.977 mW/g

**Low-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

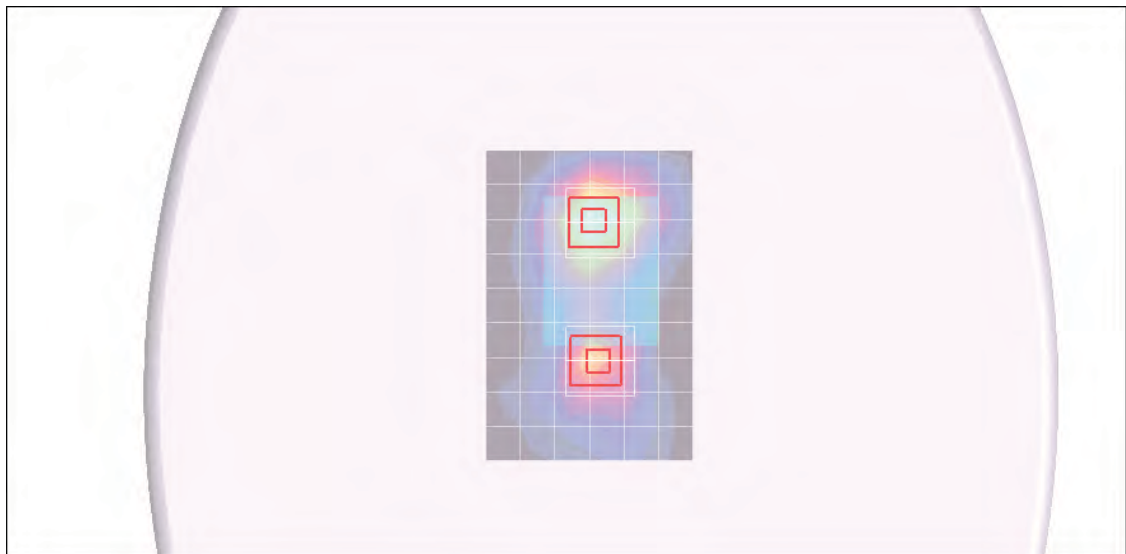
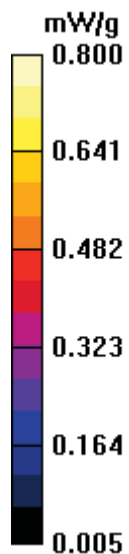
Reference Value = 25.4 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 0.784 W/kg

**SAR(1 g) = 0.485 mW/g; SAR(10 g) = 0.267 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.587 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (16QAM\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.09 mW/g

**Mid-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 26.8 V/m; Power Drift = -0.167 dB

Peak SAR (extrapolated) = 1.44 W/kg

**SAR(1 g) = 0.865 mW/g; SAR(10 g) = 0.504 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.04 mW/g

**Mid-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

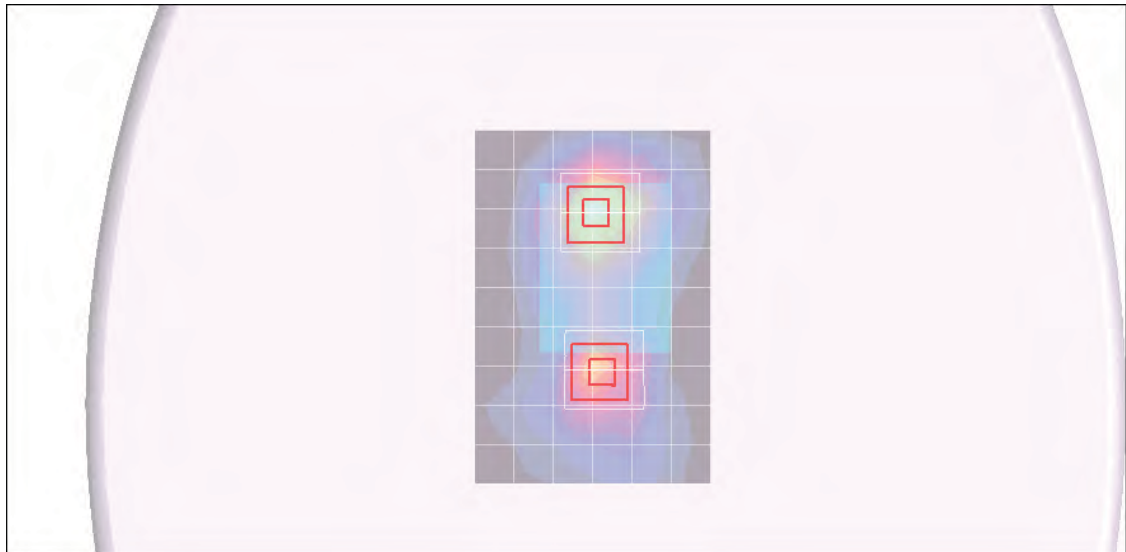
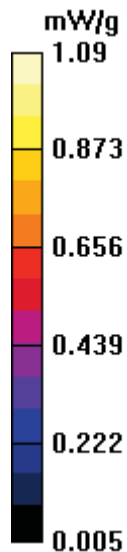
Reference Value = 26.8 V/m; Power Drift = -0.167 dB

Peak SAR (extrapolated) = 1.18 W/kg

**SAR(1 g) = 0.670 mW/g; SAR(10 g) = 0.359 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.834 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (16QAM\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.792 mW/g

**High-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 22.7 V/m; Power Drift = -0.131 dB

Peak SAR (extrapolated) = 1.04 W/kg

**SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.366 mW/g**

Maximum value of SAR (measured) = 0.756 mW/g

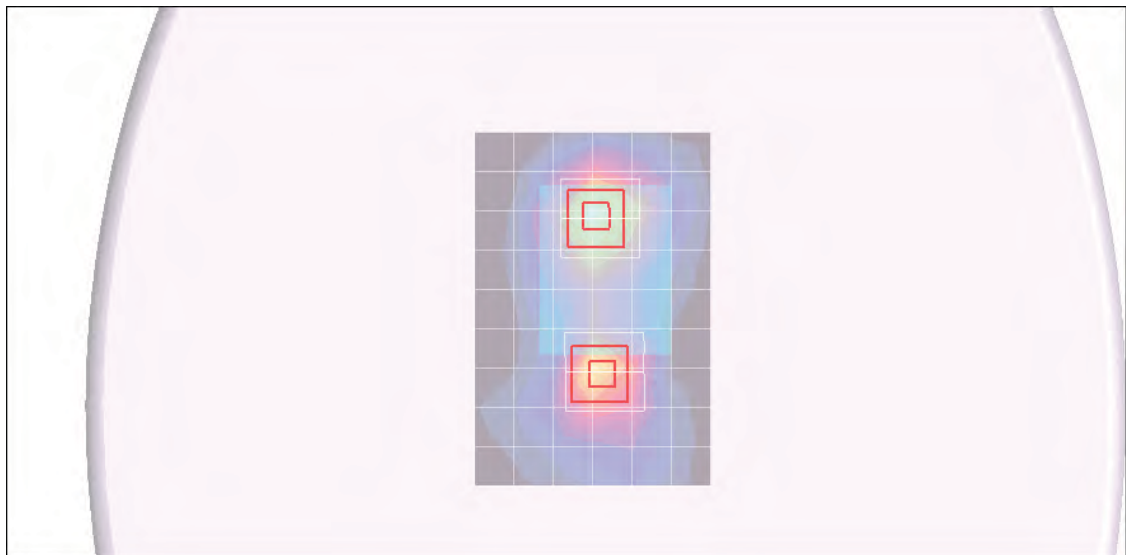
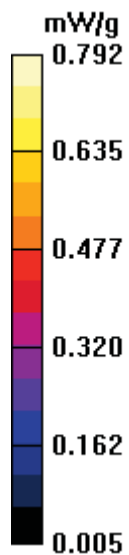
**High-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 22.7 V/m; Power Drift = -0.131 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.572 mW/g; SAR(10 g) = 0.305 mW/g**

Maximum value of SAR (measured) = 0.714 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_HORIZONTAL-UP\_10MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.501$  mho/m;  $\epsilon_r = 53.637$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.28, 7.28, 7.28); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI 4.0; Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**QPSK/M-ch (RB size=25\_RB offset=12)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.587 mW/g

**QPSK/M-ch (RB size=25\_RB offset=12)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 19.446 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.725 W/kg

**SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.265 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.574 mW/g

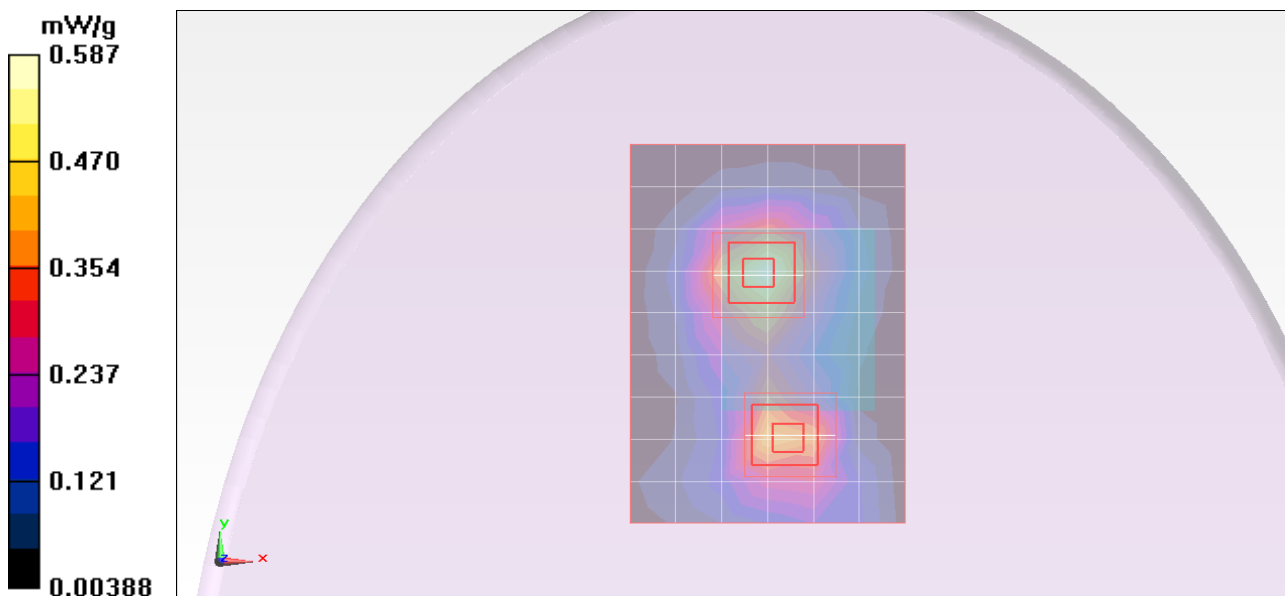
**QPSK/M-ch (RB size=25\_RB offset=12)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 19.446 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.713 W/kg

**SAR(1 g) = 0.410 mW/g; SAR(10 g) = 0.222 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.537 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_HORIZONTAL-UP\_10MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.501$  mho/m;  $\epsilon_r = 53.637$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.28, 7.28, 7.28); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI 4.0; Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**16QAM/M-ch (RB size=25\_RB offset=12)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.565 mW/g

**16QAM/M-ch (RB size=25\_RB offset=12)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=3mm

Reference Value = 19.439 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.740 W/kg

**SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.264 mW/g**Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.574 mW/g

**16QAM/M-ch (RB size=25\_RB offset=12)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid:

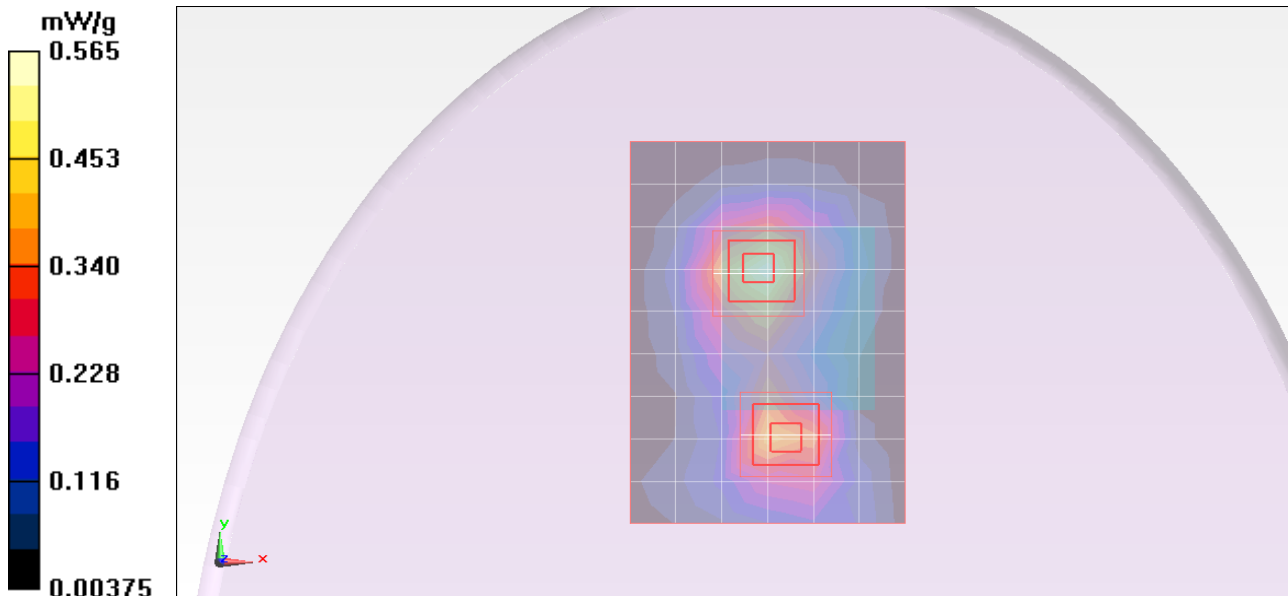
dx=5mm, dy=5mm, dz=3mm

Reference Value = 19.439 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.695 W/kg

**SAR(1 g) = 0.410 mW/g; SAR(10 g) = 0.222 mW/g**Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.537 mW/g



Test Laboratory: Compliance Certification Services (UL CCS)

## LTE Band 4\_Horizontal Up\_5MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1712.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1712.5$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**L-ch (QPSK\_RB=1\_High)/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.27 mW/g

**L-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 29.1 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 1.83 W/kg

**SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.581 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.28 mW/g

**L-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

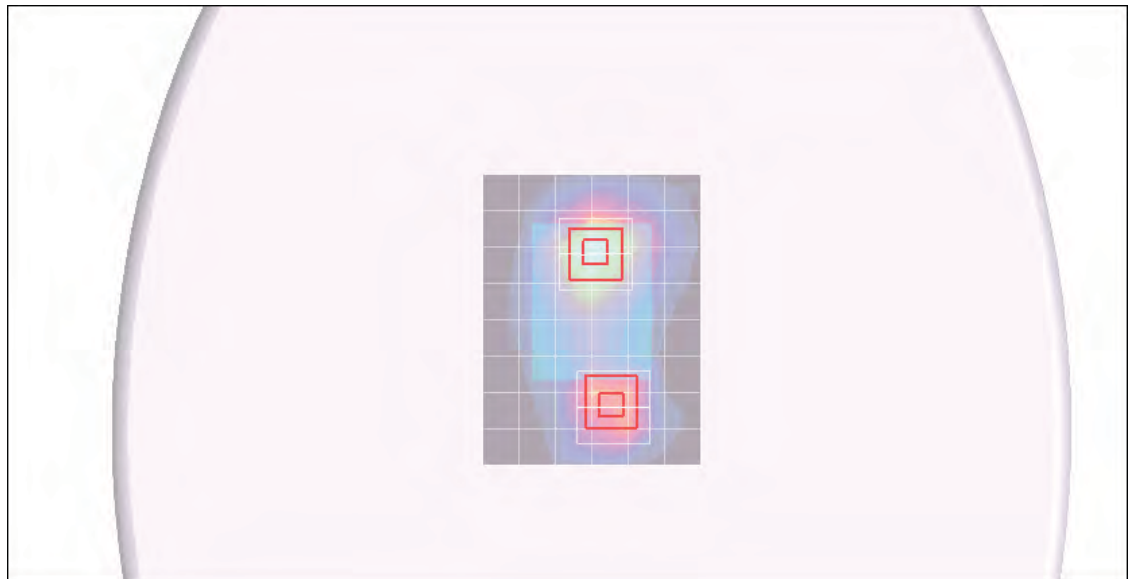
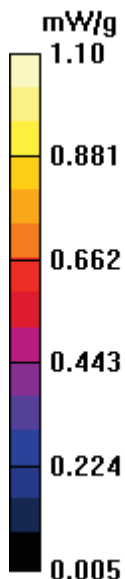
Reference Value = 29.1 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 0.813 mW/g; SAR(10 g) = 0.434 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.995 mW/g



Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Up\_5MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.51$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (QPSK\_RB=1\_High)/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.01 mW/g

**Mid-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.9 V/m; Power Drift = -0.138 dB

Peak SAR (extrapolated) = 1.36 W/kg

**SAR(1 g) = 0.830 mW/g; SAR(10 g) = 0.473 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

**Mid-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

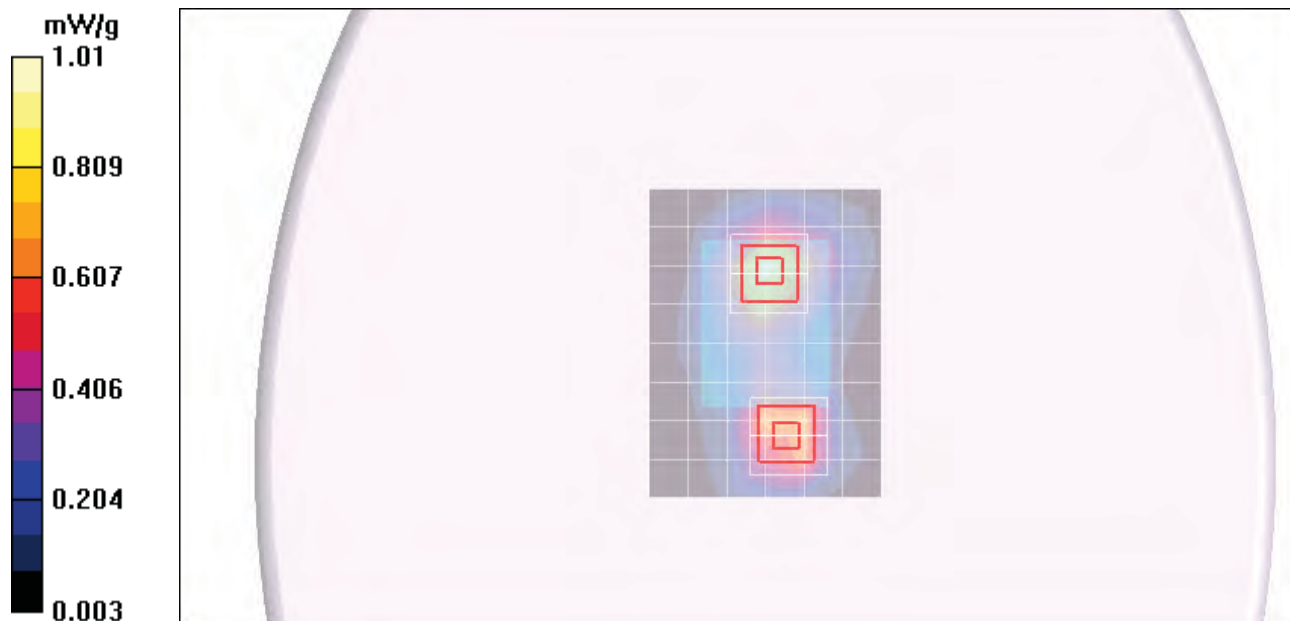
Reference Value = 25.9 V/m; Power Drift = -0.138 dB

Peak SAR (extrapolated) = 1.42 W/kg

**SAR(1 g) = 0.811 mW/g; SAR(10 g) = 0.426 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.02 mW/g





Test Laboratory: Compliance Certification Services (UL CCS)

## LTE Band 4\_Horizontal Up\_5MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1752.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1752.5$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**H-ch (QPSK\_RB=1\_High)/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.10 mW/g

**H-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 26.8 V/m; Power Drift = -0.244 dB

Peak SAR (extrapolated) = 1.81 W/kg

**SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.532 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.26 mW/g

**H-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

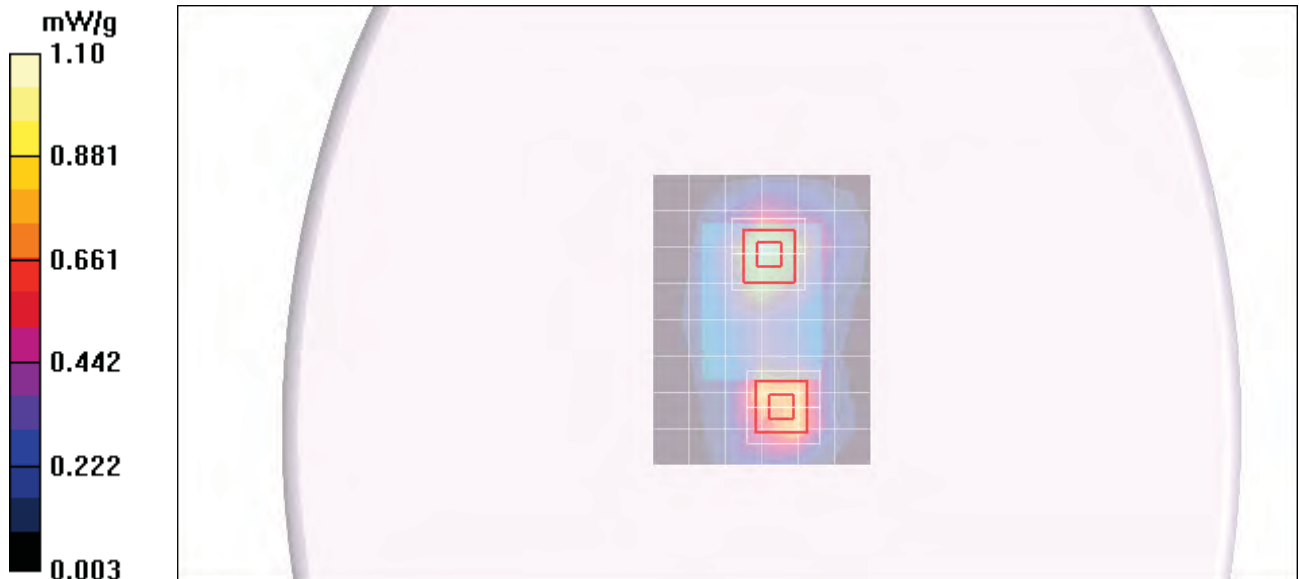
Reference Value = 26.8 V/m; Power Drift = -0.244 dB

Peak SAR (extrapolated) = 1.58 W/kg

**SAR(1 g) = 0.937 mW/g; SAR(10 g) = 0.528 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.16 mW/g



Test Laboratory: Compliance Certification Services (UL CCS)

## LTE Band 4\_Horizontal Up\_5MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1712.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1712.5$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**L-ch (QPSK\_RB=1\_Low)/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.33 mW/g

**L-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 30.2 V/m; Power Drift = -0.227 dB

Peak SAR (extrapolated) = 1.75 W/kg

**SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.610 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.30 mW/g

**L-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

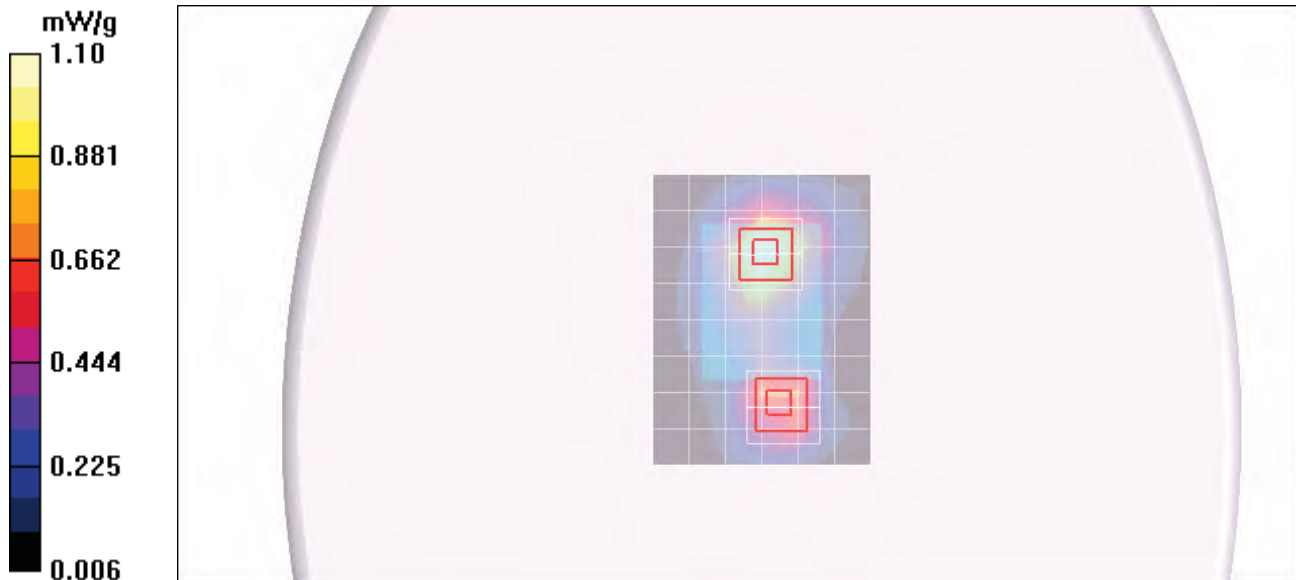
Reference Value = 30.2 V/m; Power Drift = -0.227 dB

Peak SAR (extrapolated) = 1.50 W/kg

**SAR(1 g) = 0.819 mW/g; SAR(10 g) = 0.430 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.01 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_HORIZONTAL-UP\_5MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (QPSK\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.938 mW/g

**Mid-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.4 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 1.28 W/kg

**SAR(1 g) = 0.777 mW/g; SAR(10 g) = 0.453 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.931 mW/g

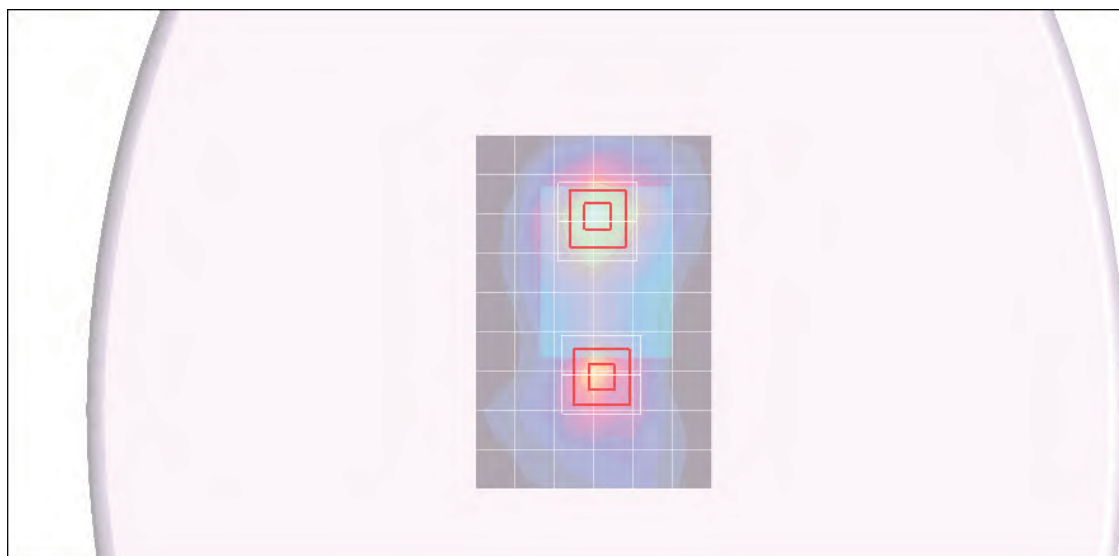
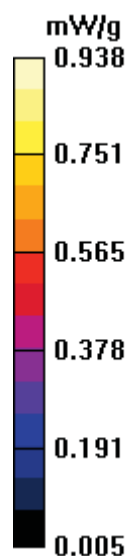
**Mid-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.4 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 1.09 W/kg

**SAR(1 g) = 0.616 mW/g; SAR(10 g) = 0.330 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.774 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_5MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1752.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1752.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (QPSK\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.923 mW/g

**High-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.1 V/m; Power Drift = -0.203 dB

Peak SAR (extrapolated) = 1.23 W/kg

**SAR(1 g) = 0.760 mW/g; SAR(10 g) = 0.445 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.907 mW/g

**High-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

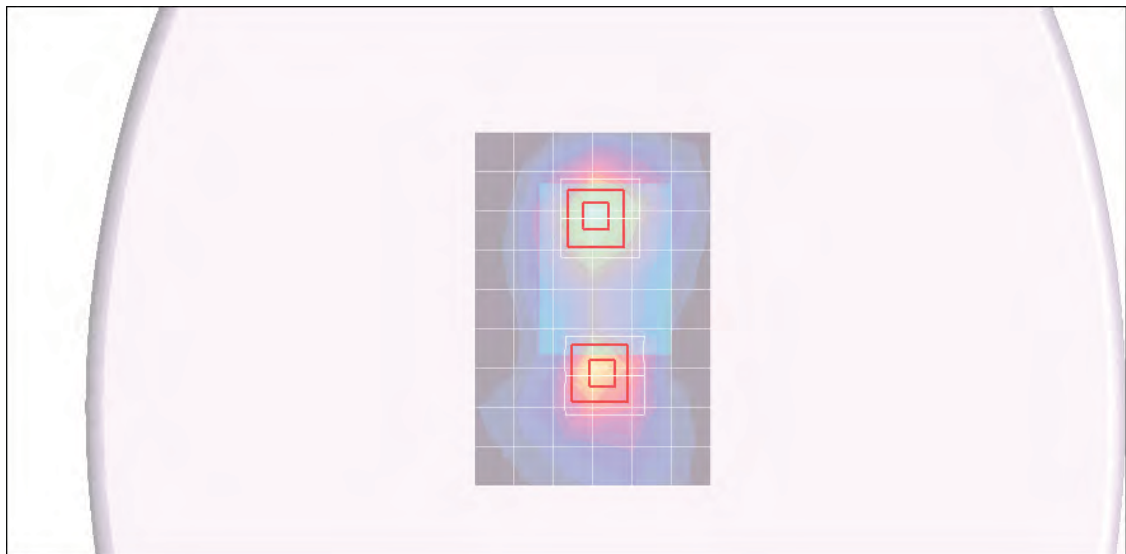
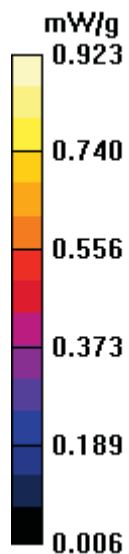
Reference Value = 25.1 V/m; Power Drift = -0.203 dB

Peak SAR (extrapolated) = 1.25 W/kg

**SAR(1 g) = 0.716 mW/g; SAR(10 g) = 0.382 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.897 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_5MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (16QAM\_RB=1\_High)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.711 mW/g

**Mid-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 22.3 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 0.975 W/kg

**SAR(1 g) = 0.596 mW/g; SAR(10 g) = 0.348 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.714 mW/g

**Mid-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

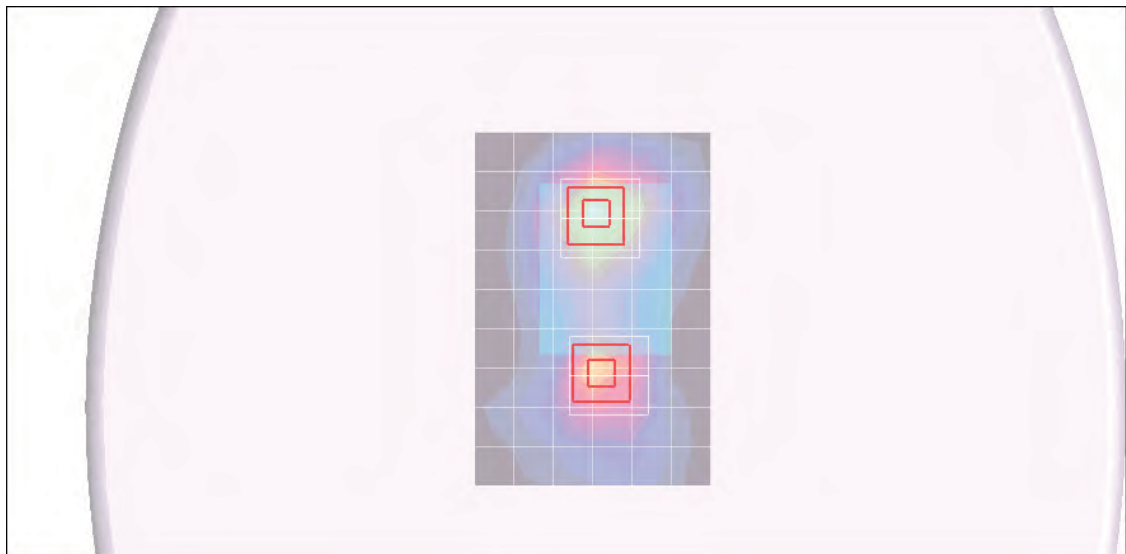
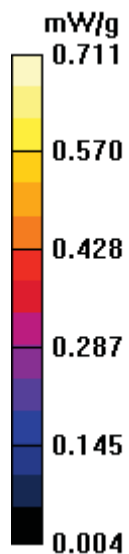
Reference Value = 22.3 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 0.868 W/kg

**SAR(1 g) = 0.495 mW/g; SAR(10 g) = 0.264 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.613 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_HORIZONTAL-UP\_5MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (16QAM\_RB=1\_Low)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.760 mW/g

**Mid-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 22.9 V/m; Power Drift = -0.167 dB

Peak SAR (extrapolated) = 1.04 W/kg

**SAR(1 g) = 0.635 mW/g; SAR(10 g) = 0.370 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.766 mW/g

**Mid-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

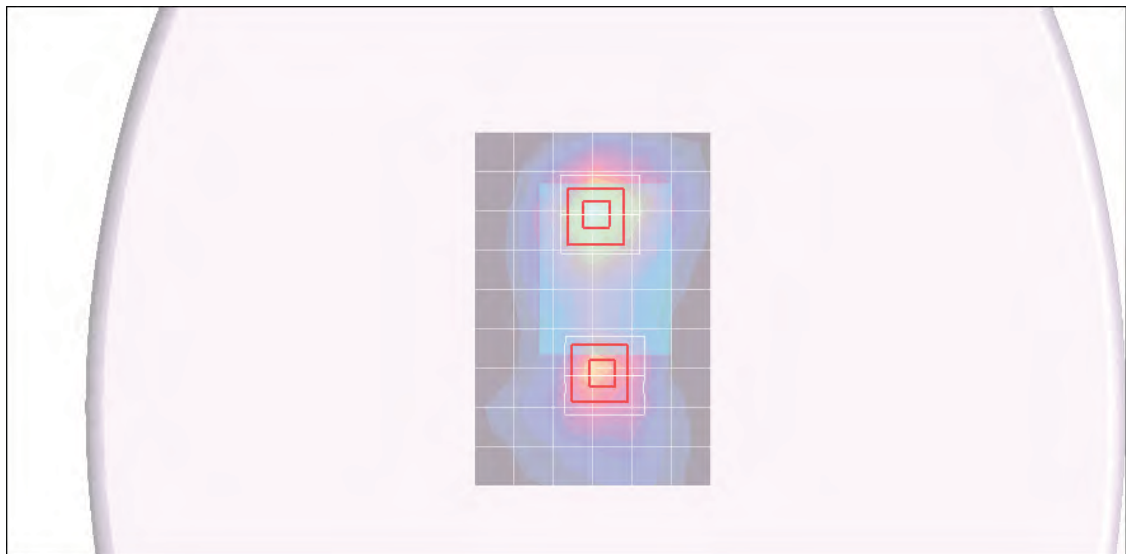
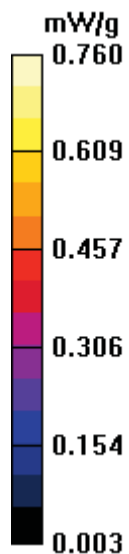
Reference Value = 22.9 V/m; Power Drift = -0.167 dB

Peak SAR (extrapolated) = 0.871 W/kg

**SAR(1 g) = 0.503 mW/g; SAR(10 g) = 0.270 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.628 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_HORIZONTAL-UP\_5MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.501$  mho/m;  $\epsilon_r = 53.637$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.28, 7.28, 7.28); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI 4.0; Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**QPSK/M-ch (RB size=12\_RB offset=6)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mmInfo: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.522 mW/g

**QPSK/M-ch (RB size=12\_RB offset=6)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 18.967 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.662 W/kg

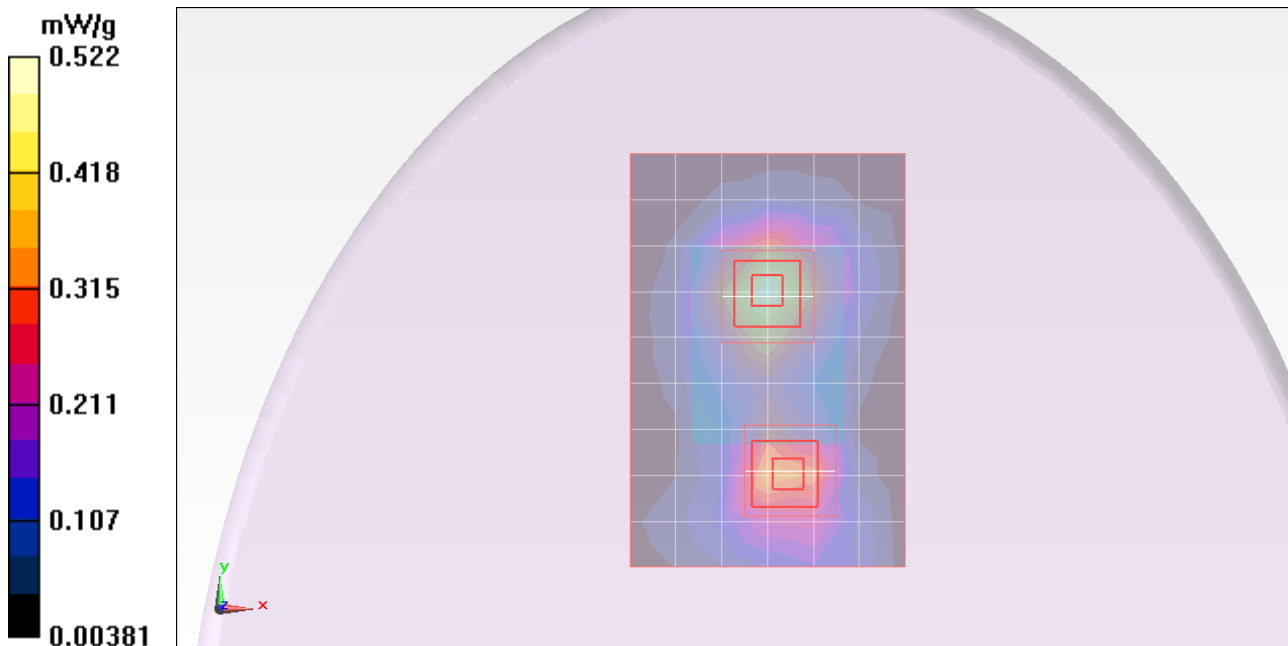
**SAR(1 g) = 0.415 mW/g; SAR(10 g) = 0.245 mW/g**Info: [Interpolated medium parameters used for SAR evaluation.](#)**QPSK/M-ch (RB size=12\_RB offset=6)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 18.967 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.645 W/kg

**SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.199 mW/g**Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.486 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_HORIZONTAL-UP\_5MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.501$  mho/m;  $\epsilon_r = 53.637$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.28, 7.28, 7.28); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI 4.0; Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**16QAM/M-ch (RB size=12\_RB offset=6)/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.530 mW/g

**16QAM/M-ch (RB size=12\_RB offset=6)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 18.899 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.676 W/kg

**SAR(1 g) = 0.417 mW/g; SAR(10 g) = 0.246 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.522 mW/g

**16QAM/M-ch (RB size=12\_RB offset=6)/Zoom Scan (7x7x9)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

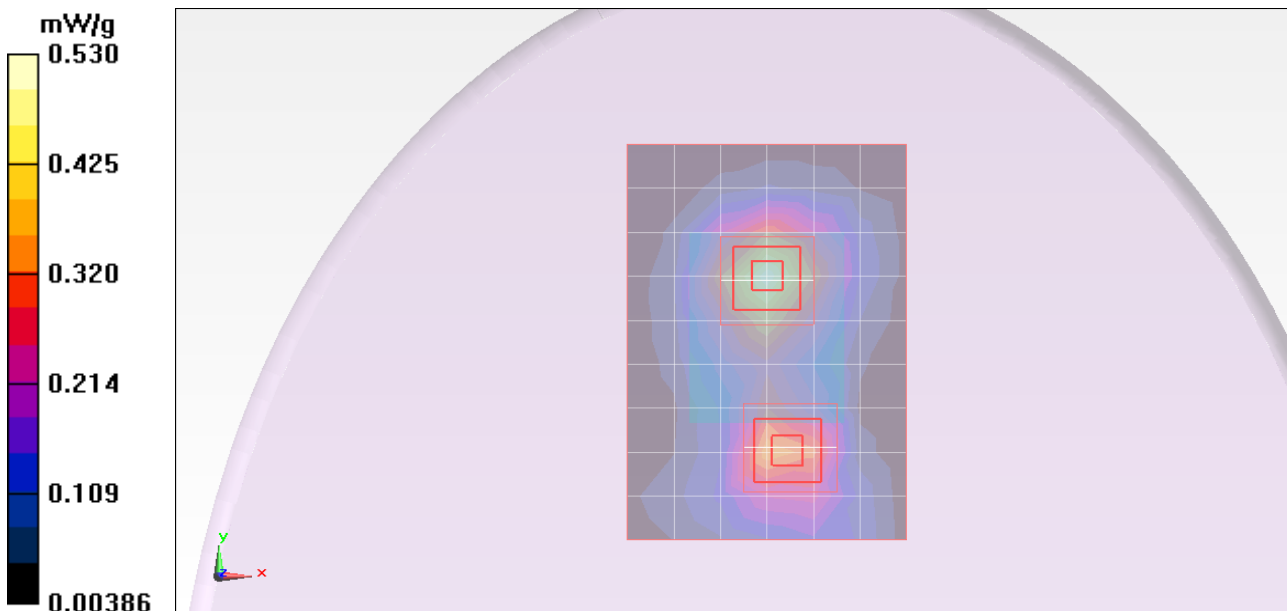
Reference Value = 18.899 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.641 W/kg

**SAR(1 g) = 0.369 mW/g; SAR(10 g) = 0.199 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.487 mW/g





Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 23.0 deg. C; Liquid Temperature: 22.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Low-ch (QPSK\_RB=1\_High)/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.67 mW/g

**Low-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

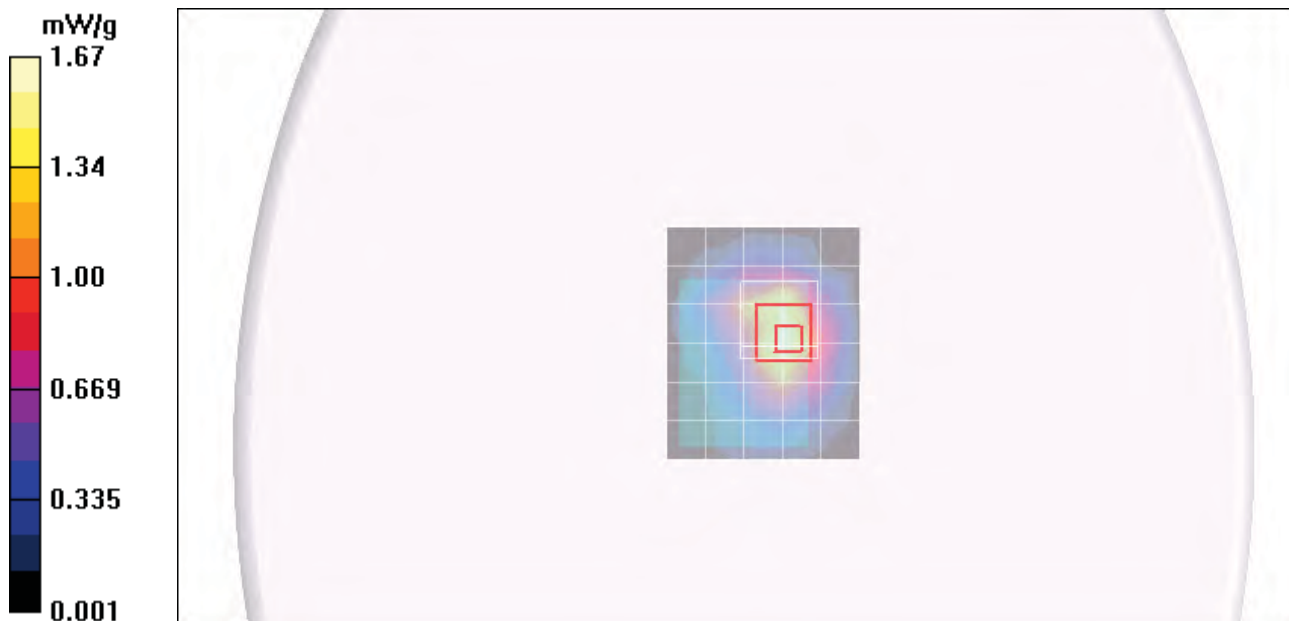
Reference Value = 33.4 V/m; Power Drift = -0.134 dB

Peak SAR (extrapolated) = 2.31 W/kg

**SAR(1 g) = 1.38 mW/g; SAR(10 g) = 0.786 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.71 mW/g



Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.51$  mho/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 23.0 deg. C; Liquid Temperature: 22.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (QPSK\_RB=1\_High)/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.50 mW/g

**Mid-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

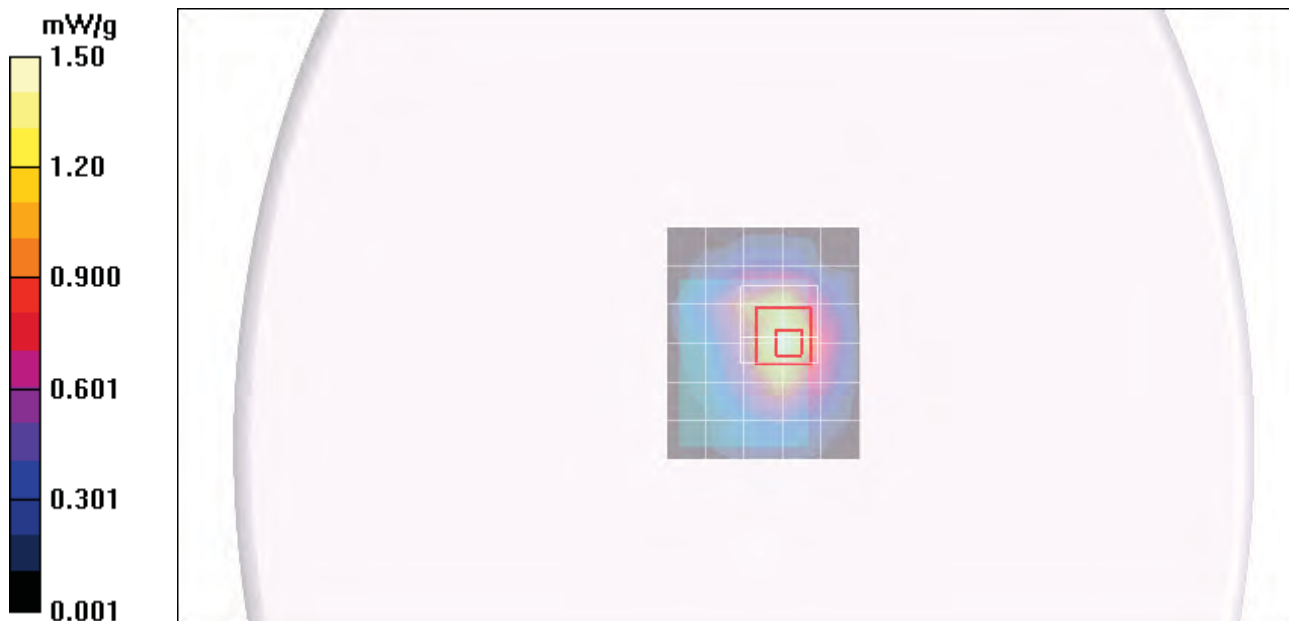
Reference Value = 31.6 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 2.06 W/kg

**SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.705 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.51 mW/g



Test Laboratory: Compliance Certification Services

### LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1749.9 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

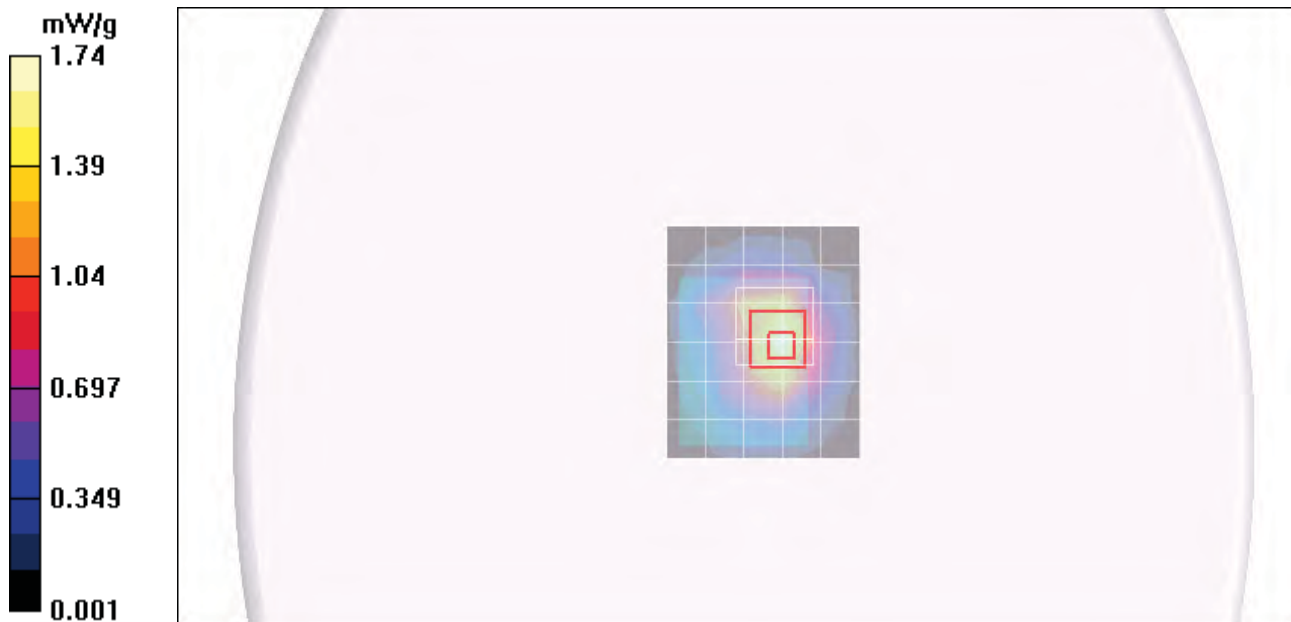
Room Ambient Temperature: 23.0 deg. C; Liquid Temperature: 22.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (QPSK\_RB=1\_High)/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.74 mW/g

**High-ch (QPSK\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm  
Reference Value = 33.9 V/m; Power Drift = 0.069 dB  
Peak SAR (extrapolated) = 2.43 W/kg  
**SAR(1 g) = 1.44 mW/g; SAR(10 g) = 0.824 mW/g**  
Maximum value of SAR (measured) = 1.73 mW/g



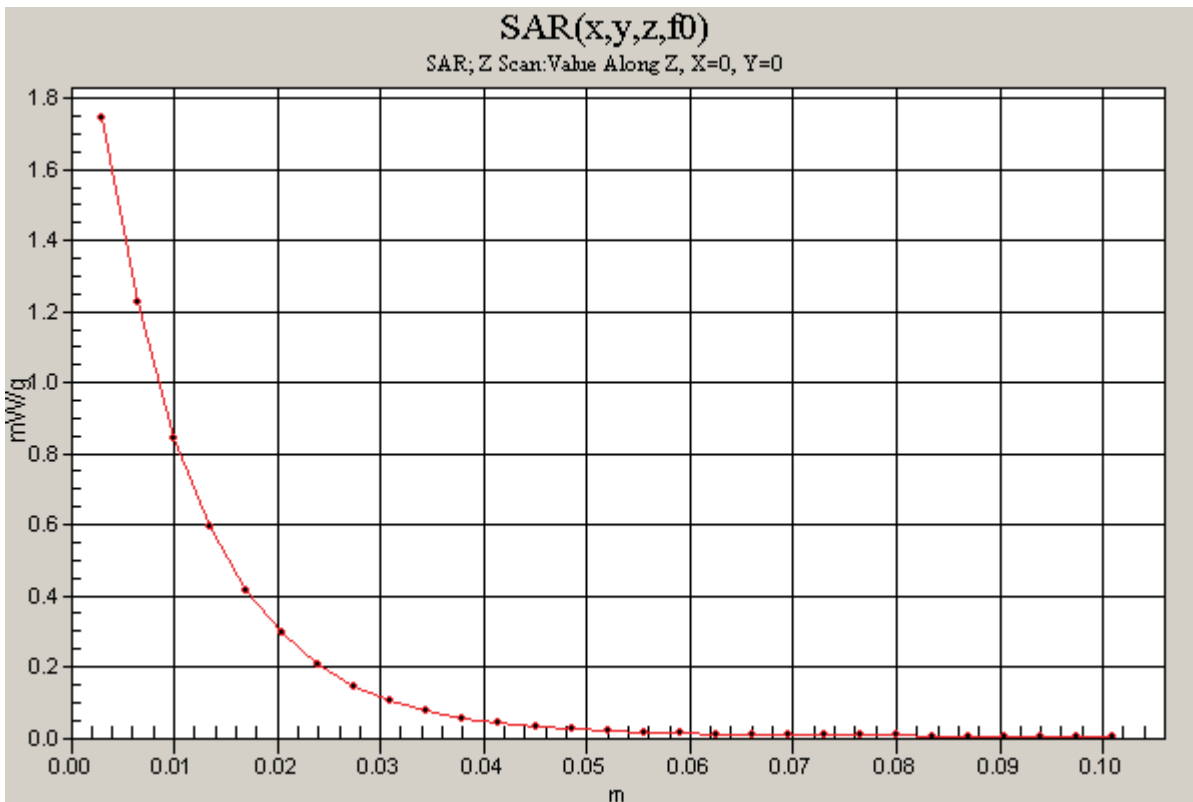
Test Laboratory: Compliance Certification Services

### LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1749.9 MHz;Duty Cycle: 1:1

**High-ch (QPSK\_RB=1\_High)/Z Scan (1x1x29):** Measurement grid: dx=20mm, dy=20mm, dz=3.5mm  
Maximum value of SAR (measured) = 1.75 mW/g



Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 23.0 deg. C; Liquid Temperature: 22.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Low-ch (UL RB=1)/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.68 mW/g

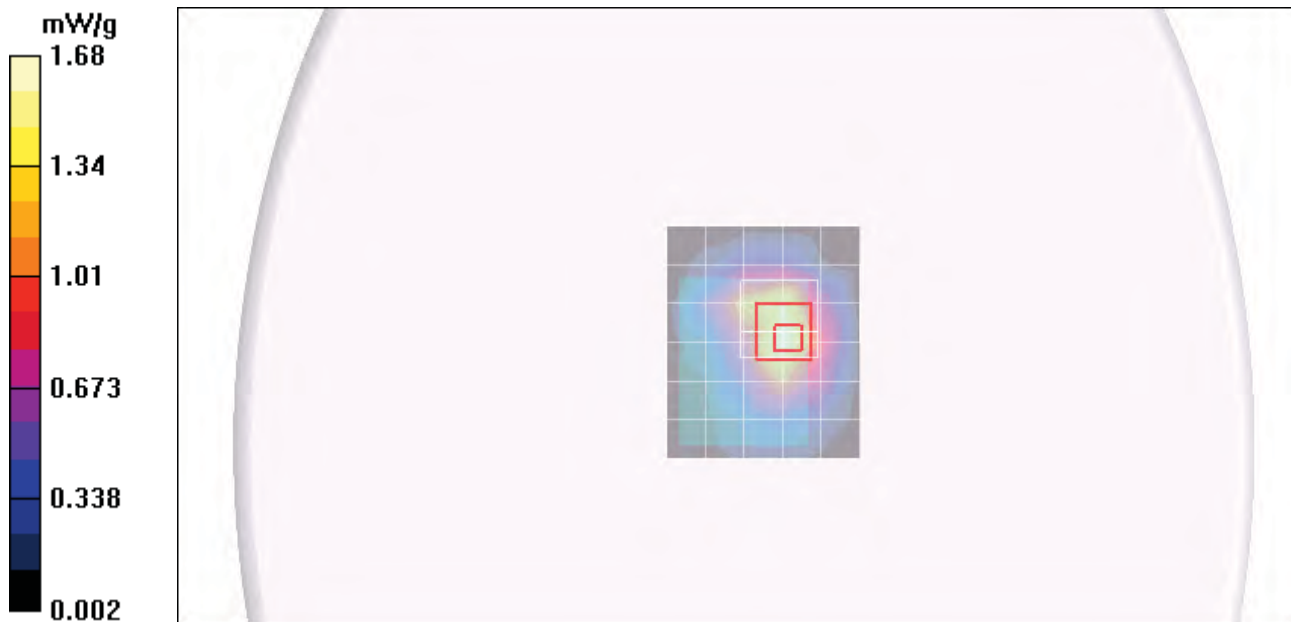
**Low-ch (UL RB=1)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 33.5 V/m; Power Drift = -0.240 dB

Peak SAR (extrapolated) = 2.32 W/kg

**SAR(1 g) = 1.4 mW/g; SAR(10 g) = 0.802 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)



Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.51$  mho/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 23.0 deg. C; Liquid Temperature: 22.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (QPSK\_RB=1\_Low)/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.55 mW/g

**Mid-ch (QPSK\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

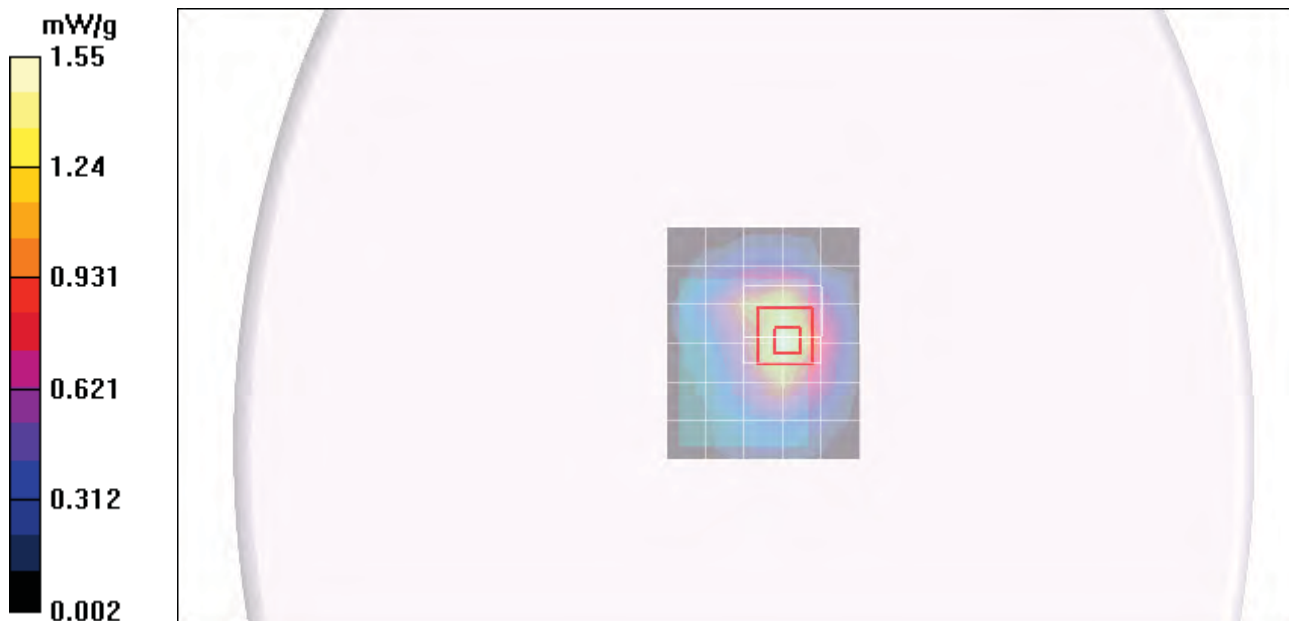
Reference Value = 32.0 V/m; Power Drift = -0.171 dB

Peak SAR (extrapolated) = 2.24 W/kg

**SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.739 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.53 mW/g



Test Laboratory: Compliance Certification Services

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1749.9 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 23.0 deg. C; Liquid Temperature: 22.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(8.51, 8.51, 8.51); Calibrated: 2/23/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (UL RB=1)/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.76 mW/g

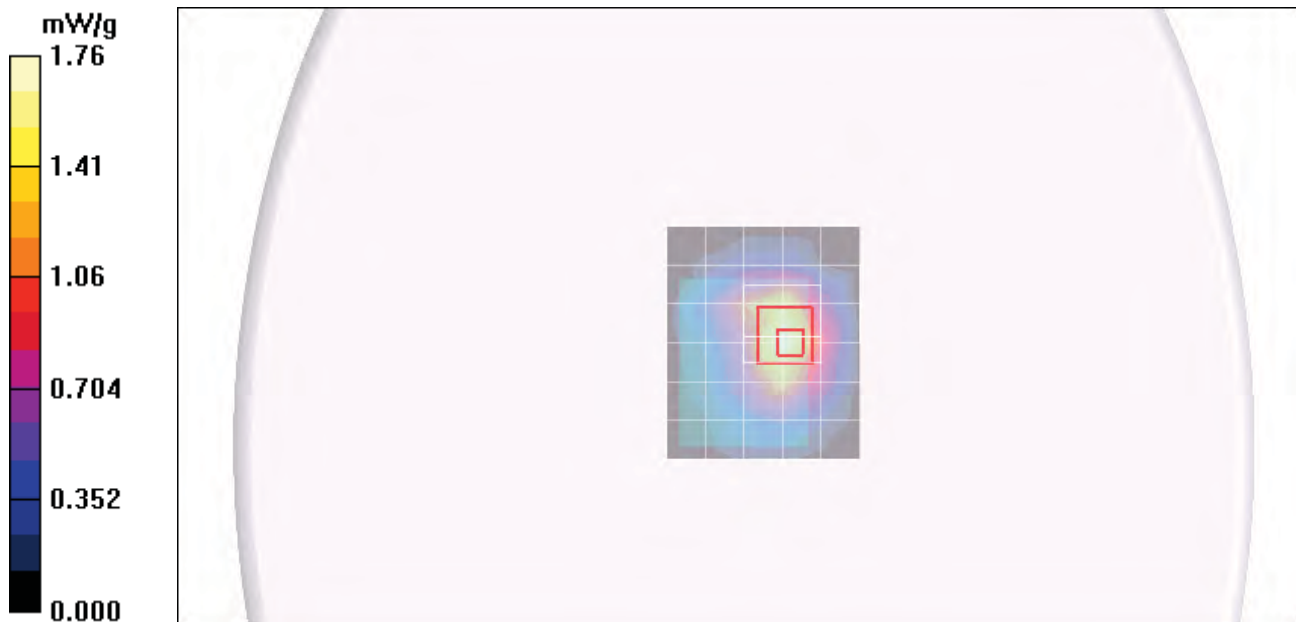
**High-ch (UL RB=1)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 34.0 V/m; Power Drift = -0.227 dB

Peak SAR (extrapolated) = 2.42 W/kg

**SAR(1 g) = 1.44 mW/g; SAR(10 g) = 0.806 mW/g**

Maximum value of SAR (measured) = 1.72 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_Horizontal Down\_10MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Low-ch (16QAM\_RB=1\_High)/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.26 mW/g

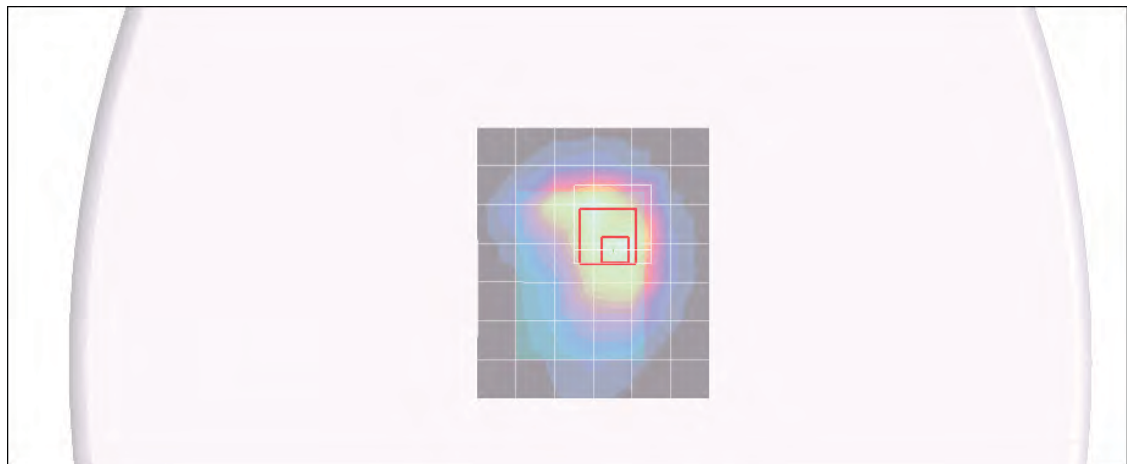
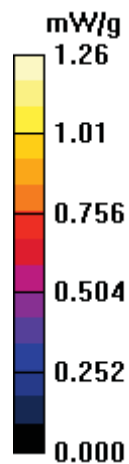
**Low-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 29.1 V/m; Power Drift = 0.195 dB

Peak SAR (extrapolated) = 2.03 W/kg

**SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.676 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.46 mW/g





Test Laboratory: UL CCS

## LTE Band 4\_Horizontal\_Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (16QAM\_RB=1\_High)/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.13 mW/g

**Mid-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

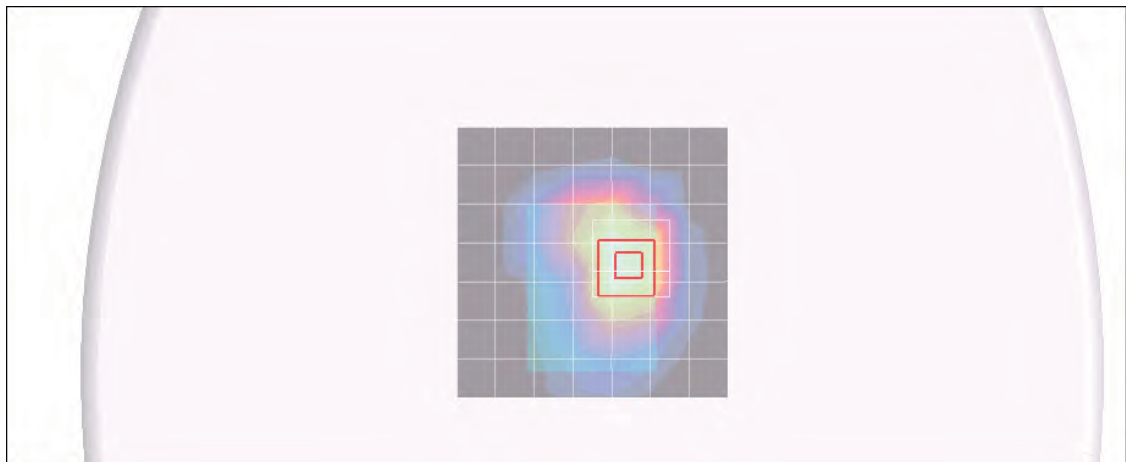
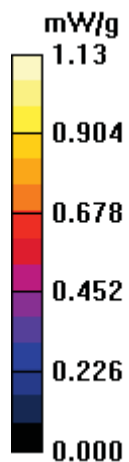
Reference Value = 27.6 V/m; Power Drift = -0.155 dB

Peak SAR (extrapolated) = 1.92 W/kg

**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.642 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.38 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.51$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (16QAM\_RB=1\_High)/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.19 mW/g

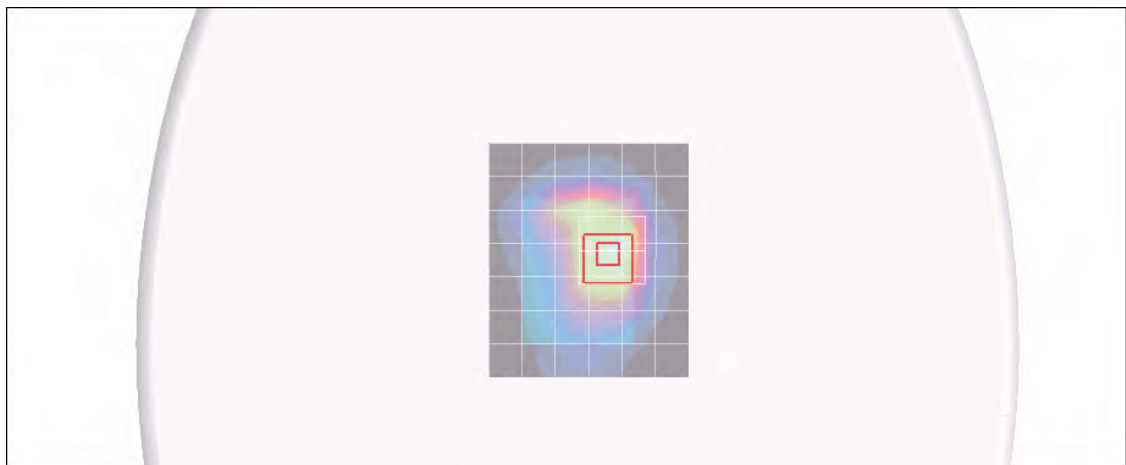
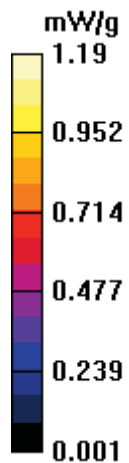
**High-ch (16QAM\_RB=1\_High)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 28.0 V/m; Power Drift = 0.151 dB

Peak SAR (extrapolated) = 1.91 W/kg

**SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.639 mW/g**

Maximum value of SAR (measured) = 1.35 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Low-ch (16QAM\_RB=1\_Low)/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.28 mW/g

**Low-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

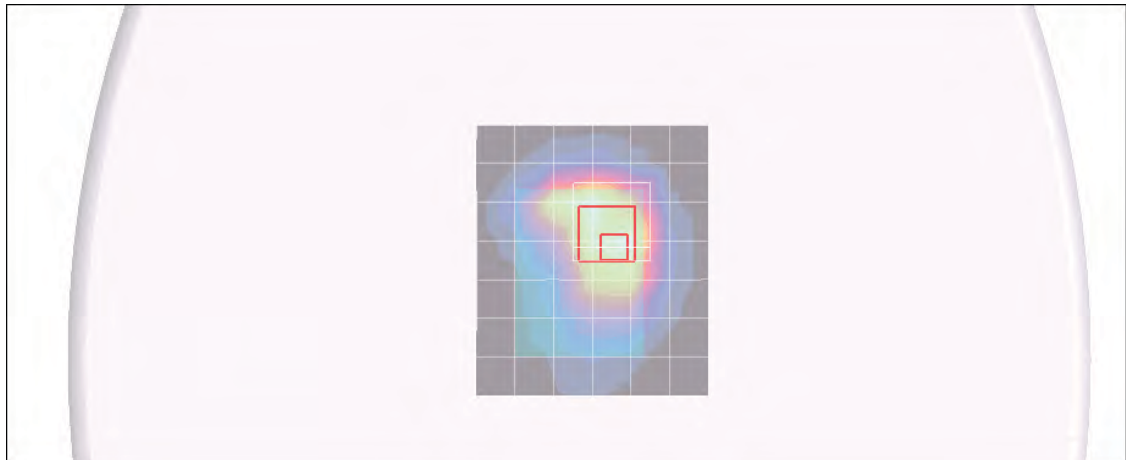
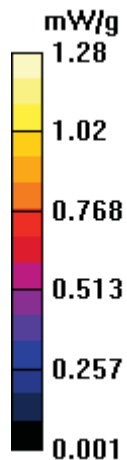
Reference Value = 29.3 V/m; Power Drift = 0.170 dB

Peak SAR (extrapolated) = 2.05 W/kg

**SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.686 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.47 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Mid-ch (16QAM\_RB=1\_Low)/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.25 mW/g

**Mid-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

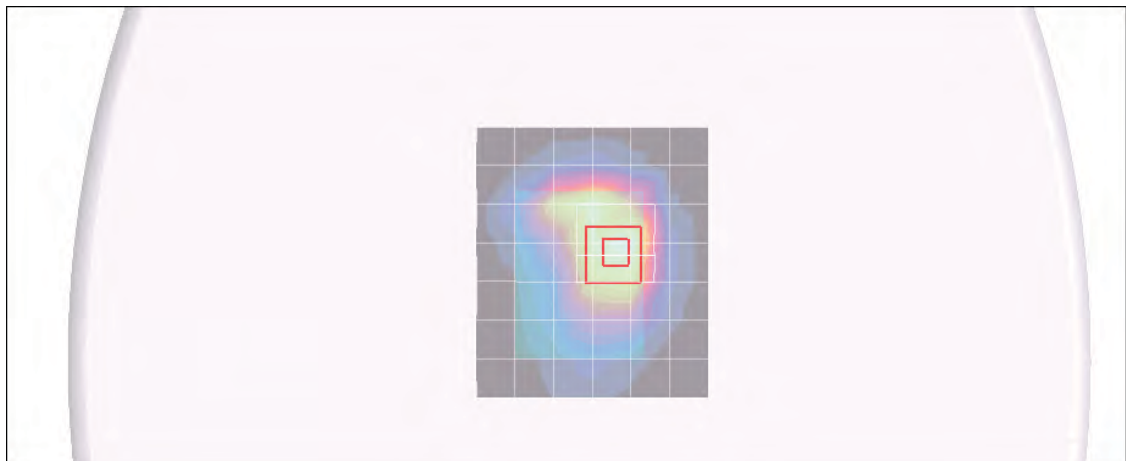
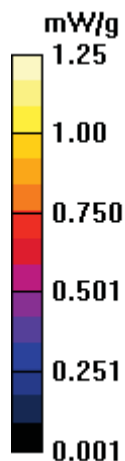
Reference Value = 28.9 V/m; Power Drift = 0.206 dB

Peak SAR (extrapolated) = 1.99 W/kg

**SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.678 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.44 mW/g



Test Laboratory: UL CCS

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.51$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(7.51, 7.51, 7.51); Calibrated: 12/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 7/21/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**High-ch (16QAM\_RB=1\_Low)/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.18 mW/g

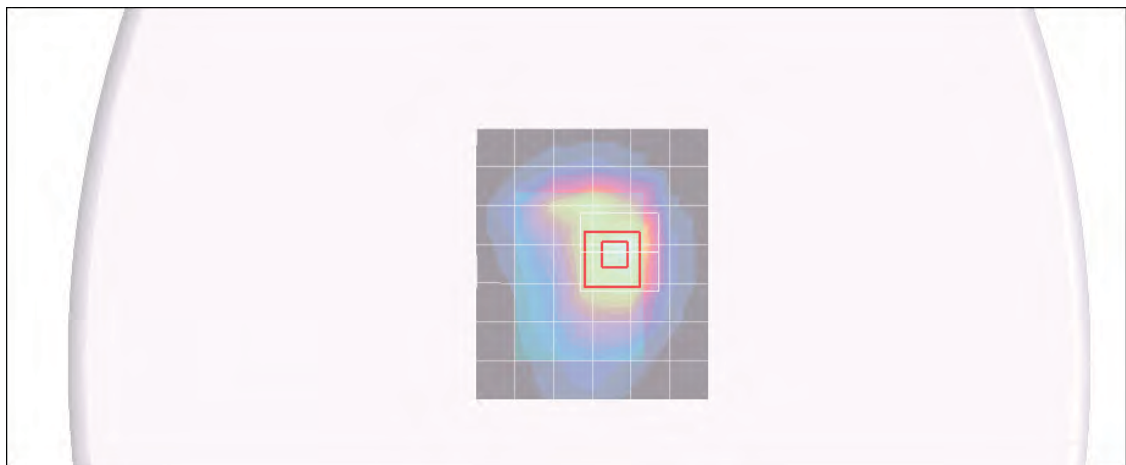
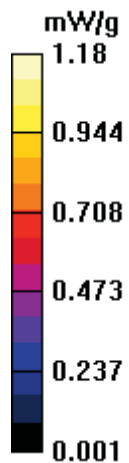
**High-ch (16QAM\_RB=1\_Low)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 27.7 V/m; Power Drift = 0.222 dB

Peak SAR (extrapolated) = 1.84 W/kg

**SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.630 mW/g**

Maximum value of SAR (measured) = 1.33 mW/g



Test Laboratory: UL CCS

**LTE Band 4\_Horizontal Down\_10MHz**

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1715.1 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1715.1$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 54.505$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.28, 7.28, 7.28); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI 4.0; Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**QPSK/L-ch (RB size=25\_RB offset=12)/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.070 mW/g

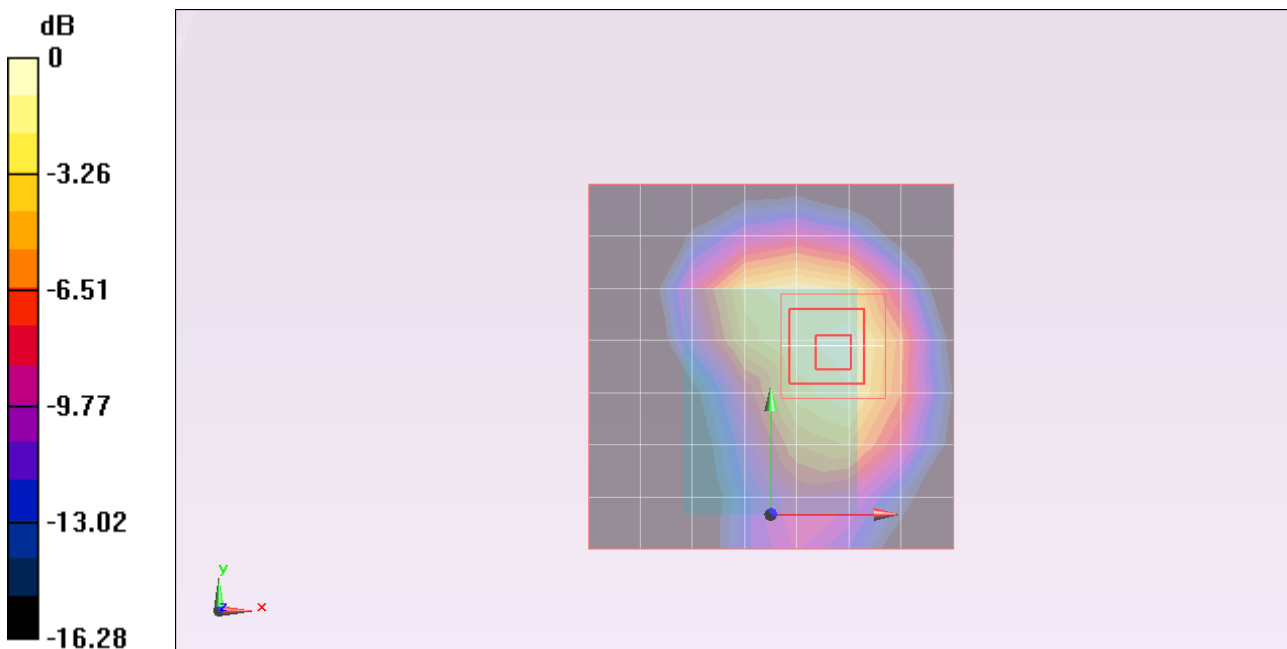
**QPSK/L-ch (RB size=25\_RB offset=12)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 26.684 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.492 W/kg

**SAR(1 g) = 0.884 mW/g; SAR(10 g) = 0.514 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.142 mW/g



0 dB = 1.140mW/g

Test Laboratory: UL CCS

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.519$  mho/m;  $\epsilon_r = 54.432$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.28, 7.28, 7.28); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI 4.0; Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**QPSK/M-ch (RB size=25\_RB offset=12)/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.952 mW/g

**QPSK/M-ch (RB size=25\_RB offset=12)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm

Reference Value = 25.329 V/m; Power Drift = 0.03 dB

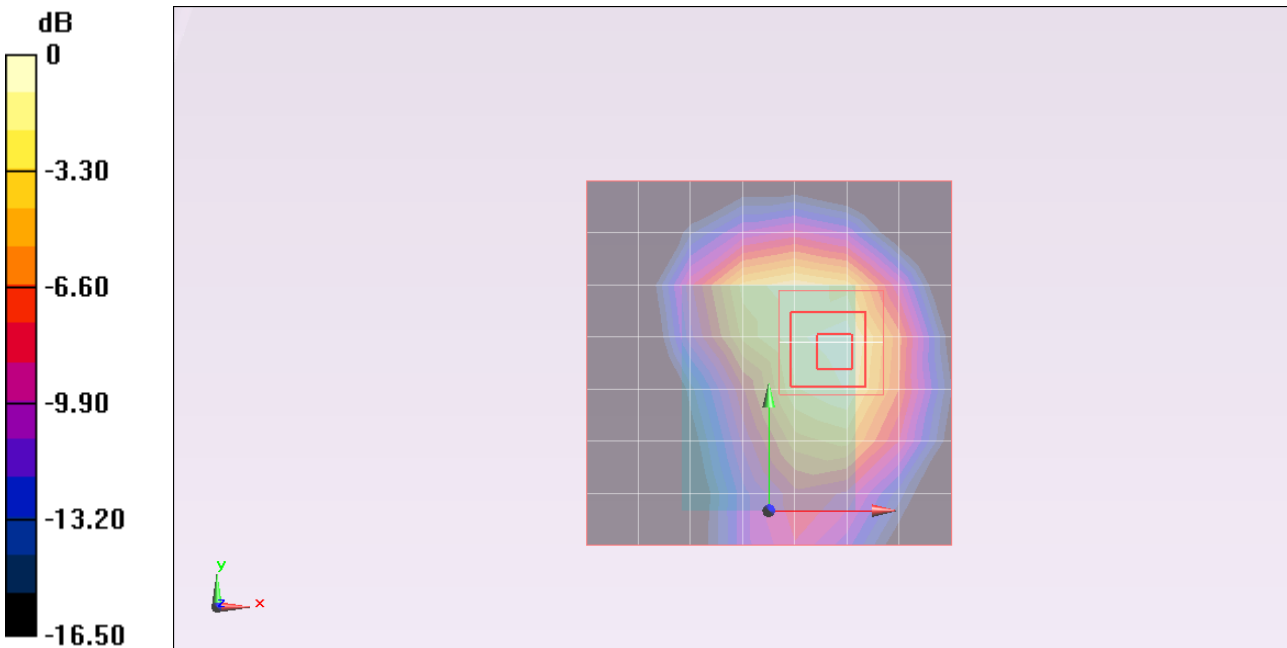
Peak SAR (extrapolated) = 1.362 W/kg

Peak SAR (extrapolated) = 1.362 W/kg

**SAR(1 g) = 0.803 mW/g; SAR(10 g) = 0.464 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.033 mW/g



0 dB = 1.030mW/g

Test Laboratory: UL CCS

## LTE Band 4\_Horizontal Down\_10MHz

DUT: Sierra Wireless; Type: AC313U; Serial: Unit # 2

Communication System: LTE Band 4; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.538$  mho/m;  $\epsilon_r = 54.356$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

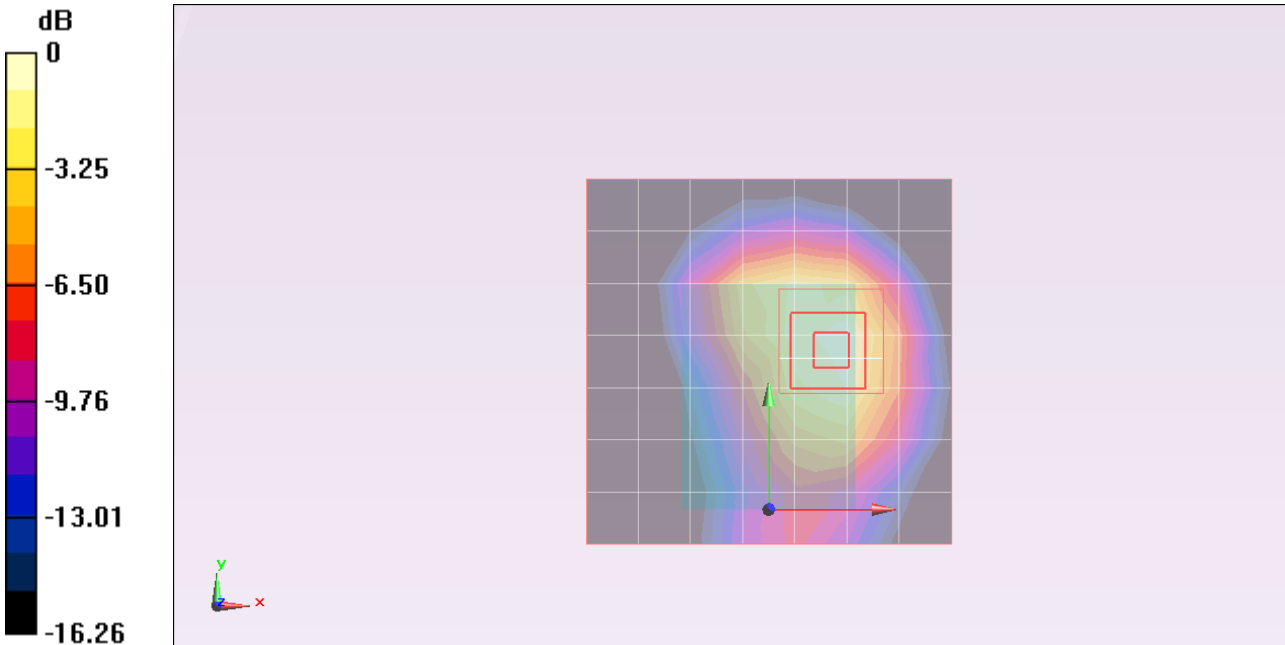
Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.28, 7.28, 7.28); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI 4.0; Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**QPSK/H-ch (RB size=25\_RB offset=12)/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.029 mW/g

**QPSK/H-ch (RB size=25\_RB offset=12)/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=3mm  
Reference Value = 25.893 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 1.459 W/kg  
**SAR(1 g) = 0.857 mW/g; SAR(10 g) = 0.491 mW/g**  
Maximum value of SAR (measured) = 1.109 mW/g



0 dB = 1.110mW/g